April 2023 Edition

QualiCare

150th Entry

Winner is

Dr S Dalvie

OPEN DAY 2023

SAVE THE DATE!!
13 MAY 2023

SANLAM HEAD OFFICE
Voortrekker Road
Belville

A FUN ATMOSPHERE, GREAT FOOD, CPD POINTS AND A CHANCE TO MEET YOUR COLLEAGUES, IS GUARANTEED!!

- 21 GP/FP Orientated talks
- 55+ exhibitors
- Lots of stalls
- Prizes up for grabs
- On-site free parking
- Exceptional eats for mid-morning tea and LEGENDARY lunch
- 22 CPD POINTS will be applied for (2 Ethical Points, 5 General Points & 15 Related Reading Points)

Lecture Topics WILL BE OF INTEREST TO Doctors, Dentists and Allied Health Care Professionals alike.

CPC Shareholder/Member: **YES** ☐ **NO** ☐

NAME:	
SURNAME:	
EMAIL ADDRESS:	
CELL NUMBER:	
LANDLINE NUMBER:	
LOCATION:	
HPCSA NUMBER: (MP,DP,OP...)	

I hereby permit CPC/Qualicare to share my name,surname and email address with the exhibitors (tick the appropriate box) for purpose of marketing. YES ☐ NO ☐

QualiCare

R 750.00 incl. VAT for CPC Shareholders and Members

R1,300.00 incl. VAT for NON - CPC Members

WhatsApp this form together with your proof of payment to 061 441 5295
OR email to pa@cpcqualicare.co.za,
to secure your place.)

TOPICS will include the latest updates/trends for GP's:

- The silent killer Dyslipidaemia,
- Update on Gynecology for General Practitioners,
- Genetic Testing for Leukemia,
- The prevention, and treatment of Venous Thrombo-embolic disease,
- Diabetic workshops,
- Hypertension workshops and
- Ethics workshops,
- Cardio-respiratory workshops
- Endocrinology snapshot for GPs
- Managed care In General Practice: The practical implications
- Treatment of Hepatitis C
- Business management of your practice
- and more to follow.

BANKING DETAILS:
FNB Claremont Account name:
Cape Primary Care Holdings Ltd
(Cheques to be made out to this name)
ACCOUNT NUMBER: 50150093439
BRANCH NUMBER: 200109

PLEASE NOTE: THIS NOTIFICATION CAN SERVE AS A TAX INVOICE

021 – 426 – 4777

CAPE PRIMARY CARE HOLDINGS (PTY) LTD REG NR 1994/00724/07 (Vat No 4350157329)

AI-Generated Medical Advice—GPT and Beyond

Special points of interest

- Open Day **150th** entry WINNER !!
- Drug interactions with combustion-free products
- Facioscapulohumeral Muscular Dystrophy
- Myasthenia Gravis Autoantibody Profile

For years, experts have speculated about the future role of artificial intelligence (AI) in health care. Some AI tools can outperform physicians on specific tasks in radiology, dermatology, and other fields, which raised concerns that AI might render certain specialists obsolete. Some feared AI might expose patients and clinicians to novel risks. Others wondered whether physicians could use AI in good conscience if they do not understand how it works, or whether clinicians who fail to adopt it might be accused of providing substandard care.

These concerns have faded somewhat as high-profile AI platforms like IBM Watson failed to deliver on their promise. Moreover, lacking anything resembling general intelligence, AI bested humans only at narrowly defined tasks. However, AI-related fears re-emerged with the rise of language learning models (LLMs), exemplified by Open AI's GPT (now in its fourth version). This technology has left clinicians wondering how they might use LLMs and what risks the technology poses to patients and clinicians.

This Viewpoint surveys the medical applications of GPT and related technologies and considers whether new forms of regulation are necessary to minimize safety and legal risks to patients and clinicians. These risks depend largely on whether the software is used to assist health care practitioners or to replace them, and the degree to which clinicians maintain control.

INSIDE THIS ISSUE

GPT and Beyond.... Continue to page 3

GPT and Beyond…. Continue from page 2

What Is GPT?

A generative pretrained transformer (GPT) is an AI tool that produces text resembling human writing, allowing users to interact with AI almost as if they are communicating with another person. The sudden rise in popularity of LLMs was driven largely by GPT-3, Open AI's third iteration, which was called the fastest growing app of all time and the most innovative LLM.

People use GPT by entering prompts—text instructions in the form of questions or commands. Creating effective AI prompts is an art as much as a science, and the possibilities seem endless. One can use GPT like a search engine. However, GPT's predictive algorithms can also answer questions that have never been posed.

If asked to write a haiku about the Krebs cycle, the software will provide one, even if nobody has written one before. GPT can explain complex topics like quantum mechanics in simple terms or provide a differential diagnosis for right upper quadrant pain. In this respect, its utility as a user-friendly scientific or medical encyclopedia is obvious. Researchers have even entered questions from the US Medical Licensing Examination into GPT-3 and claimed the software "approaches or exceeds the passing threshold." One of GPT's most impressive features is how it handles repetitive writing tasks. In seconds, it can reduce large text files to abstracts or bullet-point summaries. It can author first drafts of letters, presentations, and other documents.

However, in its current form, GPT is prone to errors and omissions. It can fail at simple tasks, such as basic arithmetic, or insidiously commit errors that go unnoticed without scrutiny by subject matter experts. Some users observe that when asked to provide references for its claims, GPT often makes them up. Educators fear students might be misinformed when relying on the software. Due to the risk of fabrication, academic publishers are requiring authors to disclose their use of the technology. Finally, algorithms generally are known to reproduce biases of their training data, creating the potential for harmful discrimination.

GPT and Beyond…. Continue to page 4

GPT and Beyond…. Continue from page 3

Potential Uses in Clinical Practice

Within health care, GPT could play roles in research, education, and clinical care. In research settings, it can help scientists formulate questions, develop study protocols, and summarize data. In medical education, GPT can serve as an interactive encyclopedia. It could simulate patient interactions to help students hone history-taking skills. GPT can even produce first drafts of progress notes, patient care plans, and other documents students must prepare for class or on the wards.

However, current versions of GPT are not HIPAA compliant and could jeopardize patient privacy. Until professional-grade versions with adequate safeguards are available, clinicians should avoid inputting protected health information.

Patients might benefit from using GPT as a medical resource. However, unless its advice is filtered through health care practitioners, false or misleading information could endanger their safety.

Legal Assessment

With all these potential uses for GPT and other LLMs, how should clinicians proceed? Does GPT pose novel legal risks or new modes of regulation? The key to understanding ethical and legal questions surrounding new technologies is rarely about the technologies themselves. What matters most is how they affect social relationships between users. One must first identify these relationships, the values that define them, and the relevant legal frameworks.

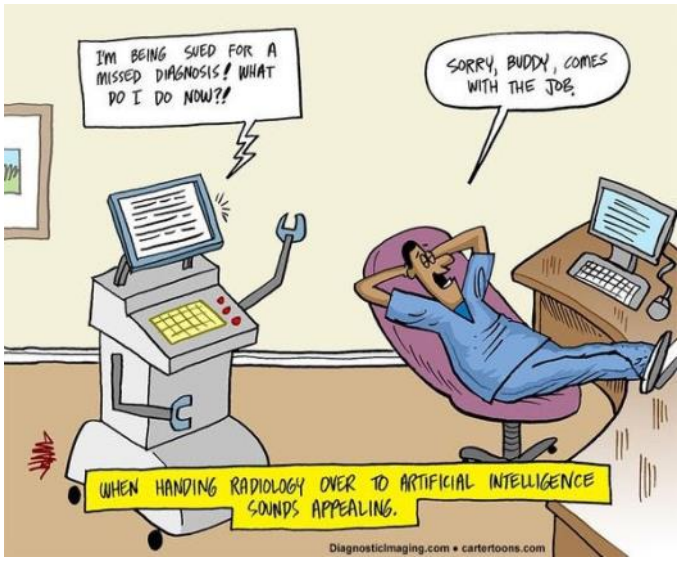
We distinguish 3 GPT use cases: AI within the patient-physician relationship that augments rather than replaces clinician judgment, patient-facing AI in health care delivery that substitutes for clinician judgment, and direct-to-consumer health advice-giving. Clinicians have distinct concerns in each context.

Consider the heavily regulated patient-physician relationship, defined by values like competence, trust, and patient autonomy. The legal framework around this relationship is designed to ensure that medical advice-giving aligns with these principles. Specifically, rules regarding licensing and discipline, malpractice liability, informed consent, and fiduciary duties reflect these values.

If GPT is used to augment rather than replace professional judgment, its introduction to clinical practice is unlikely to affect the patient-physician relationship. Using LLMs is like physicians' earlier adoption of smartphones, electronic medical records, or even old-fashioned desk references. Accordingly, GPT may be regulated as routine professional advice-giving.

From a liability perspective, it is unimportant whether clinicians understand how AI works and why it makes recommendations. What matters is whether they provide care that meets or exceeds accepted standards. Inaccurate advice generated by AI is no different from erroneous information disseminated by professionals resulting in harm when both are filtered through professionals' judgment. In that case, existing legal frameworks can assign liability to professionals for their advice, regardless of its source. That means clinicians are responsible for the outcomes. Accordingly, they should not trust GPT any more than other medical tools until they have been thoroughly validated. Clinicians can use LLMs to offload repetitive tasks or generate new ideas. However, they should scrutinize and verify their outputs to protect patients and themselves.

More worrisome and legally uncertain are patient-facing uses for GPT where AI advice becomes removed from the professional relationship.



GPT and Beyond…. Continue to page 5

GPT and Beyond.... Continue from page 4

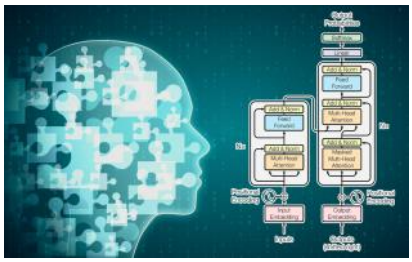
Examples include using LLMs to provide basic mental health care to patients or to replace clinic staff who usually perform triage. Here, the software may substitute for professional judgment, potentially undermining the competence and trust that define the patient-physician relationship. Due to liability stemming from the lack of professional oversight, and concerns regarding accuracy and reliability, GPT should not be used in these roles for the foreseeable future. Nevertheless, the risks have not stopped some companies from using LLMs on the front lines and fringes of health care.

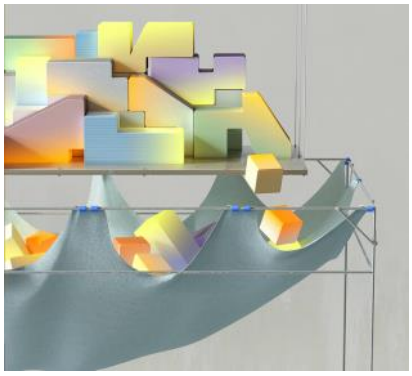
Consumer-facing uses of GPT are the least regulated. In 2023, a company called Koko, which provides emotional support chat services for people in distress, swapped GPT-3 for its usual human volunteer counselors. Without asking permission, Koko provided AI-generated messages to about 4000 consumers seeking psychological support. When users learned of this unauthorized experiment, many felt betrayed. If Koko's developers were licensed health care practitioners, they would have breached the duties of care and trust they owe to patients. However, this kind of consumer-facing wellness product lies in a legal grey area, and the responsibilities owed to users are unclear.

When consumers ask AI for emotional support or medical advice, they act outside the patient-physician relationship, and few guardrails exist. The same is true when consumers access other sources of health information, such as Google or Twitter. In those cases, the law imposes no limits like those protecting the patient-physician relationship. These consumer-facing products are not covered entities under HIPAA, and its privacy rules do not apply. Moreover, there is no malpractice liability for bad advice that causes harm. In fact, courts believe the First Amendment's free speech clause shields those who provide erroneous medical advice outside professional relationships.

The risks may be unusually high when LLMs are involved because people tend to anthropomorphize them, and, as with Koko, they might not know they are communicating with software. GPT's human-like conversational style may gain consumers' trust, making them susceptible to manipulation, experimentation, and commercial exploitation.

Although most health care laws do not apply in the consumer context, the Federal Trade Commission (FTC) could frame AI manipulation and misleading AI-generated medical advice as unfair or deceptive business practices that violate the FTC Act. Furthermore, the US Food and Drug Administration could hold software developers responsible if GPT makes false medical claims. Much of this is uncharted legal territory.





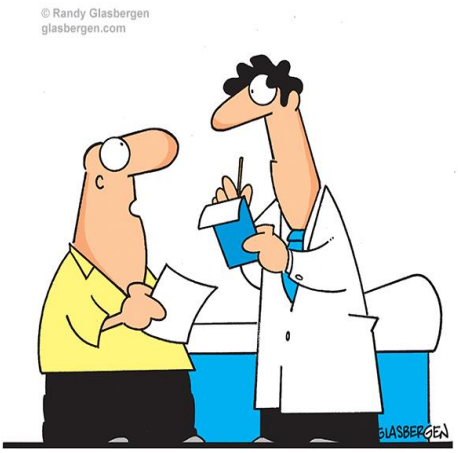
GPT and Beyond.... Continue to page 6

GPT and Beyond.... Continue from page 5

Online intermediaries like Google and Twitter, which primarily disseminate user-generated content without alteration, are protected against liability by Section 230 of the Communications Decency Act. However, GPT, which synthesizes information to produce its own content, is unlikely to be immune according to lawmakers who drafted the act and comments by Supreme Court Justice Neil Gorsuch during oral arguments for Gonzalez v Google.9 That means OpenAI could be liable for medical misinformation.

Regardless of regulation, clinicians should educate patients to be cautious when using LLMs like GPT outside the patient-physician relationship. They should explain that this kind of software is largely unregulated, potentially misleading, and, unlike health care practitioners, it owes patients none of the care, trust, and confidentiality that clinicians provide.

With respect to AI-generated medical advice, as with other innovations, we suggest focusing on relevant social relationships and how the technology affects them. If clinicians use LLMs to aid decision-making, they function like other medical resources or tools. However, using AI to replace human judgment poses safety risks to patients and may expose clinicians to legal liability. Until its accuracy and reliability are proven, GPT should not replace clinician judgment. Although clinicians are not responsible for harms caused by consumer-facing LLMs, they should educate patients about the risks. They might also advocate for FTC regulation that protects patients from false or misleading AI-generated medical advice.



"Right now I take a blue pill, a purple pill, an orange pill, a white pill, and a yellow pill. I need you to prescribe a green pill to complete my collection."

- END -

Parkinson's: Could a common cleaning chemical cause the disease?

- **More than 8.5 million people globally have Parkinson's disease.**
- **Researchers have linked Parkinson's disease to exposure to toxins, such as pesticides and air pollution.**
- **Now, scientists from the University of Rochester believe a commonly -used chemical called trichloroethylene (TCE) may also cause Parkinson's disease.**

More than 8.5 million people worldwide have Parkinson's disease — a condition affecting the nervous system that causes movement issues, such as tremors, stiffened limbs, and cognitive problems.

Doctors still do not understand why Parkinson's occurs. However, the disease has been linked to low levels of dopamine and norepinephrine in the body. Additionally, people with certain risk factors, such as age and past traumatic brain injury, are more likely to develop the condition.

Additionally, researchers believe exposure to certain toxins, such as pesticides and air pollution.

Now researchers from the University of Rochester are adding additional evidence by finding a link between Parkinson's disease and a commonly-used chemical called trichloroethylene (TCE).

Parkinson's…. Continue to page 8

Parkinson's.... Continue from page 7

What is TCE?

TCE is a colorless liquid chemical that does not occur in nature. It is known to have a chloroform-like odor.

This chemical may be found in a variety of products and industries, including:

- commercial dry cleaning
- metal degreasing
- cleaning wipes
- stain removers for clothing and carpeting
- lubricants
- spray adhesives

People can become exposed to TCE by using a product containing TCE or working in a factory where the chemical is present.

Additionally, TCE can leach into the water, air, and soil around where it is used or disposed of, contaminating what we breathe, eat, and drink.

Symptoms of exposure to high amounts of TCE include:

- dizziness
- headaches
- confusion
- nausea
- facial numbness

Previous studies link prolonged exposure to TCE to increased risk for kidney cancer, liver cancer, and non-Hodgkin lymphoma

TCE and Parkinson's disease

Dr. Ray Dorsey, a professor of neurology at the University of Rochester and lead author of this study, said he and his team decided to research a link between TCE and Parkinson's disease while preparing to write his book, Ending Parkinson's Disease.

"One of my colleagues and co-authors of this paper, Dr. Caroline Tanner, told me about TCE and Camp Lejeune," Dr. Dorsey told Medical News Today. "She and her colleague, Dr. Sam Goldman — another (study) co-author — had conducted a twin study showing that twins with an occupational or hobby exposure to TCE had a 500% increased risk of Parkinson's disease. The more I investigated the prevalence of TCE and its role in Parkinson's disease, the more I (found) with no end in sight."

"TCE is a known carcinogen — it causes cancer. It is also linked to miscarriage, neural tube defects (including babies born without brains), congenital heart disease, and multiple other medical disorders. It also has been around for 100 years and its toxicity has been known for at least 90"

Parkinson's.... Continue to page 9

Parkinson's.... Continue from page 8

Evidence through case studies

For this study, Dr. Dorsey and his team conducted a literature review. They compiled seven case studies of individuals who developed Parkinson's disease after exposure to the chemical from either the workplace or the environment.

The case studies include NBA player Brian Grant who received a Parkinson's diagnosis at the age of 36. According to researchers, he was likely exposed to TCE as a child when his father was stationed at Camp Lejeune in North Carolina.

The camp's water-supply systems were found to be contaminated with TCE in the early 1980s.

The researchers also profiled a Navy captain who had served at Camp Lejeune and was diagnosed with Parkinson's 30 years after.

And the research team also spotlighted the late United States Senator Johnny Isakson, who served in the Georgia Air National Guard, which used TCE to degrease airplanes. Senator Isakson was diagnosed with Parkinson's disease in 2015.

"Currently, the world's literature on trichloroethylene and Parkinson's disease is limited to 26 studies based on a search on PubMed," Dr. Dorsey said. "Given the widespread use and pollution with TCE and perchloroethylene (PCE), widely used in dry cleaning, and the rise of Parkinson's disease, more research is needed. We call for that."

"The seven individuals add to the existing literature — the largest previous case series was three — and demonstrate the myriad of ways that individuals can be exposed to the chemical via work or the environment," he added. "Importantly, most are unaware because they never knew about the exposure and it occurred decades ago."

How can people lower their TCE exposure?

In order for people to lower their exposure to TCE, Dr. Dorsey stated at a societal level the U.S. should ban TCE and PCE.

"In January 2023, the EPA found that TCE 'poses an unreasonable risk to human health'," he continued. "A month earlier, it concluded the same about PCE. We don't drive cars or fly airplanes from the 1920s, when commercial production of TCE began, because engineers have developed safer alternatives. Chemists can do the same."

"Second, we should notify the public, especially those who live near contaminated sites, contain them, and prevent the entry of these gases into homes, schools, and workplaces with relatively inexpensive remediation systems, akin to what is used for radon," Dr. Dorsey added.

MNT also spoke with Dr. Ariana Spentzos, Ph.D., Science and Policy Fellow at the Green Science Policy Institute, who was not involved in this study.

Dr. Spentzos said it is unsurprising that this study found a link between TCE exposure and Parkinson's disease. She explained: "TCE has a number of known adverse health effects and several studies over the last few decades have suggested TCE exposure as a risk factor for Parkinson's disease even from exposures decades before disease onset. The Department of Labor has even issued guidance on workers' compensation acknowledging a link between TCE exposure and Parkinson's."

For people looking to lessen their TCE exposure, Dr. Spentzos said most TCE exposure occurs through inhalation.

"Indoor air quality can be improved by increasing ventilation or using air filters with activated carbon, although more sophisticated systems used for radon mitigation are most recommended," she detailed. "Since up to 30% of drinking water in the U.S. may be contaminated with TCE, the easiest way to reduce TCE levels is to filter your drinking water with activated carbon filters. Whole-house water filter systems can help avoid additional exposure through bathing, dishwashing, or other household uses."

"Additionally, avoid using any TCE-containing consumer products," Dr. Spentzos added. "Check to make sure that any paint strippers, stain-removers, adhesives, degreasers, and sealants, among other products, do not contain TCE in the ingredients list."

- END -

Drug interactions with combustion-free (e-cigarettes, heat-not-burn, snus and other nicotine-containing) products

Combustion-free products (e.g., e-cigarettes, heat-not-burn, snus and other nicotine-containing) could be beneficial for people taking certain medicines. These products may reduce drug interactions if cigarette smokers switch to them. A peer-reviewed publication in 'Toxicology Reports' by Praneet Valodia (PhD) in 2022 titled 'The role of heat-not-burn, snus and other nicotine-containing products as interventions for epileptic patients who take phenytoin and smoke cigarettes'[(1)] provides an example of such an interaction where these products could be beneficial.

The influence of smoke on many commonly used medicines makes smoking one of the primary sources of drug interactions. Cigarette smoke is well-known to induce the metabolism of certain medicines, e.g., phenytoin[2], a widely used medicine for epilepsy, by inducing liver enzymes. This may reduce the clinical effect of phenytoin by decreasing the concentration of phenytoin in the blood which may result in a suboptimal therapeutic effect and thus reduced epilepsy control. Switching from cigarettes to combustion-free products is likely to reduce the effect of cigarette smoke on the metabolism of medicines.

How is the metabolism of phenytoin reduced by switching from smoking cigarettes to combustion-free products?

The combustion of tobacco in cigarettes produces smoke that is known to contain several polycyclic aromatic hydrocarbons (PAHs) that can lead to faster metabolism of many medicines in the liver. For combustion-free (as the name implies) products, there is an absence of combustion of tobacco and hence fewer chemicals such PAHs are produced that metabolize certain medicines3. An analysis by the United States Food and Drug Administration (FDA)3, a leading authority in the world in drug regulation, reported a greater than 90% reduction in benzo(a)pyrene, a PAH, in combustion-free products relative to cigarettes. Similarly, it was shown that the concentration of 3-OH-B[α]P, a metabolite fraction of inhaled benzo (a)pyrene, had decreased from baseline by approximately 65-71% and 71-77% when switching from cigarettes to a heat-not-burn product or smoking abstinence, respectively3. The reduced PAH exposure, in turn, is expected to reduce the induction of enzymes in the liver, thereby reducing phenytoin metabolism in the liver.

Drug interactions .... Continue to page 11

Drug interactions …. Continue from page 10

What are the implications of the results of this study?

1. The dose of phenytoin should be reassessed when switching from an induced metabolic state caused by cigarette smoke to combustion-free products. Combustion-free products (regardless of their nicotine content) should be considered as alternatives to cigarettes for epileptic patients taking phenytoin and who do not quit smoking.

2. The principles discussed above for phenytoin could be applied to other medicines. Similarly to phenytoin, smoking has been shown to increase the metabolism of many other medicines4,5,6,7,8 by inducing a wide range of drug-metabolizing enzymes. If nicotine does not contribute to the increased metabolic rate of other medicines, similarly to phenytoin, then there is an important, and possibly, an unconsidered impact of combustion-free products in patients who take medicines that are affected by smoking.

3. In patients taking phenytoin, the potential for drug interactions after smoking cessation should be considered. An important consideration after smoking cessation is how quickly the induction of hepatic cytochrome P450 enzymes dissipates. Liver enzymes have been shown to return to normal levels within five days after smoking cessation9. Decreased activity of the liver enzymes after smoking cessation increases the risk of adverse drug reactions.

4. The interaction between cigarettes smoke and medicines should be carefully considered after smoking cessation. For other medicines, besides phenytoin (due to its nonlinear pharmacokinetics), a stepwise daily-dose reduction of approximately 10% until the fourth day after smoking cessation is recommended10. When patients enter hospitals, they are required to stop smoking abruptly. Such abrupt smoking cessation may affect the metabolism of medicines, and healthcare practitioners are urged to consider the clinical implications.

5. If a switch to combustion-free products is recommended in a patient who cannot quit smoking cigarettes, then the clinical significance of this decision should be considered with reference to the influence of smoking on the clinical pharmacokinetics of the medicine. Patients who smoke, have recently quit smoking, or have switched to a combustion-free product should be screened for potential interactions with medicines due to the effect of smoke on the metabolism of medicines.

6. The best option is for a smoker to quit smoking. It this is not possible, then the patient should consider a combustion-free product. Switching to a combustion-free product is likely to result in lower levels of PAHs, which should lead to lower induction of microsomal enzymes in the liver and potentially a slower rate of phenytoin metabolism. This may result in higher serum phenytoin concentrations, and hence, the dose of phenytoin may require adjustment to avoid toxicity.

It is hoped that this article will encourage all healthcare practitioners to consider the influence of cigarette smoke on phenytoin metabolism and its clinical significance

REFERENCES

1) P. Valodia. The role of heat-not-burn, snus and other nicotine-containing products as interventions for epileptic patients who take phenytoin and smoke cigarettes. Toxicology Reports. Published 9 May 2022. Online.
2) P. Valodia, P.I. Folb, M.A. Seymour, R. Miller, L McFadyen, Factors influencing the population pharmacokinetic parameters of phenytoin using nonlinear mixed-effects modelling in adult epileptic patients in South Africa, Ther. Drug Monit. 21(1) (1999) 57-62.
3) Food and Drug Administration, Office of Science, Center for Tobacco Products, Food and Drug Administration Briefing Document. Meeting of the Tobacco Products Scientific Advisory Committee (TPSAC), 24-25 January (2018).
4) L.A. Kroon, Drug interactions with smoking, Am. J. Health Syst. Pharm. 64(18) (2007) 1917-1921.
5) M. O'Malley, A.N. King, M. Conte, V.L. Ellingrod, N. Ramnath, Effects of cigarette smoking on metabolism and effectiveness of systemic therapy for lung cancer, J. Thorac. Oncol. 9(7) (2014) 917-926.
6) S.D. Schaffer, S. Yoon, I. Zadezensky, A review of smoking cessation: potentially risky effects on prescribed medications, J. Clin. Nurs. 18(11) (2009) 1533-1540.
7) C. Lucas, J. Martin, Smoking and drug interactions, Aust. Prescr. 36 (2013) 102-104.
8) L.G. Miller, Recent developments in the study of the effects of cigarette smoking on clinical pharmacokinetics and clinical pharmacodynamics. Clinical Pharmacokinetics 17(2) (1989) 90-108.
9) A. van der Plas, S. Pouly, N. Blanc, C. Haziza, G. de La Bourdonnaye, B. Titz, J. Hoeng, N.V. Ivanov, B. Taranu, A. Heremans, Impact of switching to a heat-not-burn tobacco product on CYP1A2 activity, Toxicology reports 7 (2020) 1480-1486.
10) M.S. Faber, U. Fuhr, Time response of cytochrome P450 1A2 activity on cessation of heavy smoking, Clin. Pharmacol. Ther. 76(2) (2004) 178-184.

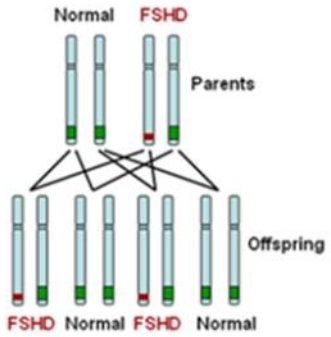
- END -

Facioscapulohumeral muscular dystrophy (FSHD)

Facioscapulohumeral muscular dystrophy (FSHD) is a rare genetic disorder that affects the muscles of the face, shoulders, and upper arms. It is one of the most common types of muscular dystrophy, affecting about 1 in 8,000 individuals worldwide. FSHD is caused by a genetic mutation that leads to the progressive weakening and loss of muscle tissue, which can result in mobility impairment and a reduced quality of life.

The genetic cause of FSHD is complex and involves a deletion or reduction in the number of repeats of a specific DNA sequence in the D4Z4 region on chromosome 4. This deletion or reduction results in the loss of a critical regulatory element that controls the expression of genes involved in muscle development and function.

FSHD can be inherited in an autosomal dominant pattern, meaning that an affected individual has a 50% chance of passing the mutated gene to their offspring.



Genetic testing for FSHD can help individuals understand their risk for developing the condition. There are two types of genetic tests for FSHD: DNA analysis of blood and muscle biopsy. DNA analysis involves taking a blood sample from the individual and analyzing it for the presence of the mutated gene whereas a muscle biopsy involves removing a small sample of muscle tissue and analyzing it for signs of genetic mutation.

DNA analysis is the most common type of genetic test for FSHD and involves analyzing the number of D4Z4 repeats on chromosome 4. There are several types of genetic tests available, with the combination of Southern Blotting and PCR, being the most common genetic tests used to diagnose FSHD. In the last decade, Optical Genome Mapping (OGM) has developed a streamlined pipeline to detect D4Z4 repeat expansions (the hallmark of FSHD) or deletions, offering several advantages over traditional methods.

OGM is a high-resolution imaging technique that visualizes individual DNA molecules at a resolution of 10 kb and better. This technology can be used to create a high-quality map of the entire genome, including the D4Z4 region on chromosome 4. This method additionally allows for the detection of structural changes in the genome, such as deletions or duplications, with a high level of accuracy.

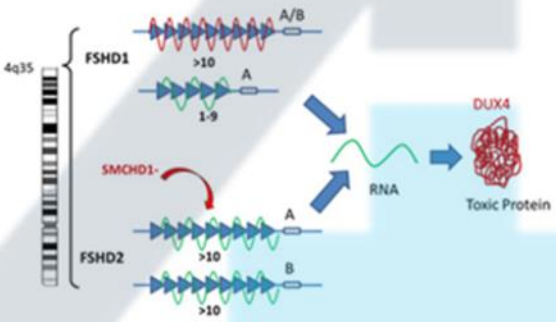
Individuals with fewer than 11 repeats are considered to have a normal number of repeats and are not at risk for developing FSHD. Individuals with between 11 and 25 repeats are considered to have an intermediate number of repeats and may or may not develop FSHD. Individuals with fewer than 25 repeats may be considered to have a reduced penetrance form of FSHD, which means that they may have a milder form of the condition. Individuals with more than 25 repeats are considered to have FSHD and are at risk for developing the condition.

Traditional genetic testing methods for FSHD rely on a combination of Southern blotting and polymerase chain reaction (PCR). These methods are time-consuming and can be prone to errors. OGM, on the other hand, offers a faster and more accurate way to diagnose FSHD. In South Africa, genetic testing for FSHD are sent abroad for diagnosis, using traditional methods like Southern Blotting and PCR. Many laboratories who have adopted OGM, now use this technology to diagnose FSHD routinely. With the adoption of OGM in 2021, A Plus Clinical Laboratories, is the first laboratory in Africa that can offer this diagnostic test for FSHD, reducing turnaround time and allowing patients to receive the necessary counselling and prepare for future family planning earlier.

In addition to diagnosing FSHD, OGM can also be used to identify individuals who are carriers of the disease. Carriers have one copy of the FSHD-causing deletion, but do not exhibit any symptoms of the disease. Identifying carriers is important for genetic counselling and family planning purposes.

Muscle biopsy is a more invasive form of genetic testing for FSHD. It involves removing a small sample of muscle tissue and analyzing it for signs of genetic mutation. Muscle biopsy is typically only performed in cases where DNA analysis is inconclusive or when a definitive diagnosis is required.

Genetic testing for FSHD can provide important information for individuals and families. It can help individuals understand their risk for developing the condition and can inform family planning decisions. Genetic testing can also help with early detection and intervention, which can improve outcomes for individuals with FSHD.



Read more on FSHD and OGM:
https://www.sciencedirect.com/science/article/pii/S1525157821002464

CLINICAL LABORATORIES

Genetic Testing
Rare Diseases

A Plus Clinical Laboratories make use of state-of-the-art technology like Optical Genome Mapping (OGM) to help **diagnose rare genetic disorders**. Our advanced testing capabilities can provide **more accurate** and **comprehensive** results compared to traditional testing methods, allowing for **earlier diagnosis** and more **personalized treatment** plans.

What is Optical Genome Mapping?

Optical Genome Mapping is a cutting-edge technology that uses high-resolution imaging to analyze a person's genome. OGM can detect structural variations in DNA that can cause rare genetic disorders. It is a non-invasive and highly accurate testing method that provides a comprehensive view of the entire genome.

How does OGM testing work?

OGM testing is a simple and non-invasive process that involves collecting a small blood sample. The sample is then analyzed using high-resolution imaging to detect structural variations in DNA. Results are typically available within a few weeks.

Who can benefit from OGM testing?

OGM testing can benefit anyone who **suspects they may have a rare genetic disorder** or has a **family history** of rare genetic disorders. OGM testing may also be recommended for individuals with **unexplained symptoms** or **developmental delays.**

Our Rare Genetic Disorder Testing Centre is dedicated to providing the most accurate and comprehensive testing services to our patients. Our team of experts is highly trained in the latest OGM technology and has extensive experience in diagnosing rare genetic disorders. We work closely with healthcare providers to ensure the best possible outcomes.

1 in 15
people in South Africa will be affected by a rare disease at some point in their lives

72% of all rare diseases are genetic

>7000 different types

8 years on average to diagnose

5685
Pathogenic Genes in our Congenital Genetic Panel

Reduced Turnaround Time
Early Detection
Accurate Diagnosis
Comprehensive analysis
Personalized treatment

www.a-pluslab.co.za
087 470 0707

THE PATHCARE NEWS

Myasthenia Gravis Autoantibody Profile

Myasthenia Gravis (MG) is an autoimmune neuromuscular disorder mediated by autoantibodies that target functionally vital proteins in the post-synaptic membrane at the neuromuscular junction (NMJ).[1] MG presents clinically with a fluctuating degree and variable combination of motor weakness in the ocular, bulbar, limb, and respiratory muscles. **The detection of antibodies plays a central role in confirming MG diagnosis, defining subgroups, and guiding the management of MG patients:**[1,2]

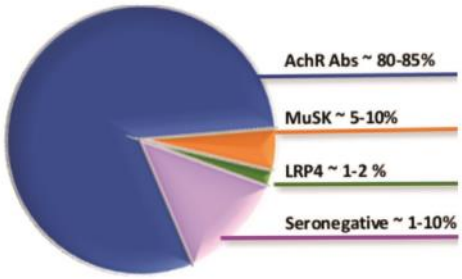


Table 1. Myasthenia Gravis subgroups[1]

Subgroup	Age at onset	Thymus	Antibody
Early onset	<50 yrs	Hyperplasia common	AchR
Late-onset	≥50 yrs	Atrophy common	
Thymoma	Any age	Lymphoepithelioma	
MuSK	Any age	Normal	MuSK
LRP4	Any age	Normal	LRP4
Ocular	Any age	Variable	Variable
Seronegative	Any age	Variable	None

Figure 1. Prevalence of MG autoantibodies and MG subgroups.[1]

MG with **Acetylcholine Receptor** antibodies **(AchR Abs)**:

Two-thirds of MG patients have generalized *early-onset* or *late-onset* disease and no thymoma. Whereas early-onset MG is associated with thymic hyperplasia and co-existing autoimmune conditions, late-onset MG is diagnosed more frequently in patients with thymic atrophy. Ten percent of MG patients have a *thymoma*, with prevalence increasing with age. In addition to the AchR Abs, thymoma and late-onset MG patients may also have Titin Abs, an indicator of more severe disease.

MG with **Muscle-Specific Kinase** antibodies **(MuSK Abs)**:

MuSK antibody-mediated MG accounts for 5-10% of MG cases. These patients may have more severe weakness, sometimes with muscle atrophy, and have marked symptoms from facial and bulbar muscles than patients with Ach-R antibodies.

MG with low-density **Lipoprotein receptor-related protein 4** antibodies **(LRP4 Abs)***:

LRP4 Abs account for 1-2% of all patients with MG and usually presents with mild-to-moderate symptoms.

Ocular MG:

In 15% of all MG patients, the disease is confined to the ocular muscles. Only half of *ocular MG* patients have detectable muscle antibodies with traditional assays. An explanation for this may include that MG patients with low-affinity clustered Abs have a higher prevalence of ocular MG. The conventional radioimmunoprecipitation (RIPA) assay is not sensitive enough to detect the low-affinity Abs. The cell-based assay (CBA) mimics the expression of native clustered antibodies on the cell surface, allowing for improved sensitivity in detecting the low-affinity AchR Abs. The fixed CBA may detect up to 20% of previously seronegative ocular MG cases.[3]

Seronegative MG:

In approximately 10% of generalized MG, the patients have no detectable muscle antibodies (seronegative MG). This classification depends on the assay type and the number of antibodies tested. With advances in assay technology, the number of seronegative MG patients may decline.

PathCare now offers an MG autoantibody test panel for improved diagnostic accuracy (Table 2):

Table 2. Myasthenia Gravis autoantibody test panel (PathCare)

Autoantibody (Method)	Description of method
AchR IgG (IIF)# *Cell-Based Assay*	Both adult AchR- and fetal AchR- are included in this fixed cell-based assay (CBA) to increase the assay's sensitivity. The cells are transfected with rapsyn to mimic the clustering of receptors on the cell surface, allowing the detection of low-affinity antibodies. This assay can also distinguish between acquired and congenital MG in the paediatric population. **The CBA may detect up to one-third of cases previously classified as seronegative.**[1,4]
AchR IgG (ELISA)	This immunoassay employs a mixture of adult and fetal AchR and allows for semi-quantitation. The ELISA assay may be less sensitive than the CBA for low-affinity AchR Abs.
MuSK IgG (IIF)# *Cell-Based Assay*	This IgG-specific MuSK fixed CBA has demonstrated good sensitivity and specificity compared with the conventional radioimmunoassay.[5,6]

Notes: # The AchR and MuSK antibodies are combined on one Cell-Based Assay (CBA) and cannot be separated.

** If LRP4 antibody testing is required, please contact the laboratory for arrangements (send-away test).*

Table 3. Test information for the Myasthenia Gravis antibody panel	
Test code	H6067
Sample type	Preferred: Serum (Yellow top tube) or Alternative: EDTA, Citrate, and Heparin plasma
Turnaround time	24 – 48 hrs after the samples reach the reference laboratory
Cost	R 1 210.90 (depending on Medical aid/payment method)

Conclusion

The combination of test methods, including the novel fixed Cell-Based assay for AchR and MuSK antibodies, will provide optimal sensitivity and specificity and may aid in more accurate diagnosis and classification of MG patients, improving disease management.

Information prepared by: M Lloyd and P Schoeman.
March 2023

References:

1. Gilhus NE. Myasthenia Gravis. *NEJM* 2016; 375:2570-81.
2. Gambino CM *et al*. Comparative analysis of BIOCHIP mosaic-based indirect immunofluorescence with Enzyme-Linked Immunosorbent assay for diagnosing Myasthenia Gravis. *Diagnostics* 2021; 11: 2098; doi.org/10.3390/diagnostics11112098.
3. Frykman H, Kumar P. Laboratory testing of Myasthenia gravis: New treatments drive change. *JALM* 2021; 1087-1089; DOI: 10.1093/jalm/jfaa199.
4. Spagni G *et al*. Comparison of fixed and live cell-based assay for the detection of AchR and MuSK antibodies in Myasthenia Gravis. *Neurol Neuroimmunol Neuroinflamm* 2023; 10:e2000038; doi:10.1212/NXI.0000000000200038.
5. Huda S et al. IgG-specific cell-based assay detects potentially pathogenic MuSK-Abs in seronegative MG. *Neurol Neuroimmunol Neuroinflamm* 2017; 4:e357; doi: 10.1212/NXI.0000000000000357.
6. Lazaridis k, Tzartos SJ. Autoantibody specificities in myasthenia gravis; implications for improved diagnostics and therapeutics. Front. Immunol. 11:212; doi: 10.3389/fimmu.2020.00212.

Professionalism is not a dress code

A would-be patient in a small town in South Africa sought the services of a psychologist. In this particular town, there was only one to choose from. She visited the practice, but the first impression she got, before even consulting with the psychologist, led to her absconding on the pretence that she had to step outside to make a quick phone call. She thereafter lodged a complaint with the HPCSA against the psychologist.

In her complaint, she made the following remarks: “The entrance of the practice looked like a scene from the Jungle Book.” She also said the psychologist had a loud voice and the physical appearance of a motorcyclist, such that she believed he was a patient rather than the practitioner. His jeans were worn out, torn up and loose, she alleged. He had visible tattoos. He wore a sleeveless vest. The complainant even went as far as to rebuke the psychologist’s grey chest and arm hair, and the chain around his neck.

The complainant summed it up by saying that while she was not one to name and shame, her view was that the above needed to be investigated and rectified.

How did Medical Protection assist?

The psychologist, as a member of Medical Protection, asked for assistance after receiving notification of the complaint from the HPCSA. In doing so, he prepared a written report regarding the allegations, which he sent to Medical Protection for our professional views and advice.

We acted swiftly to appoint a firm from our panel of expert attorneys, to assist the member in preparing a formal written response to the complaint. The attorneys then formally went on record for the member; that is, they notified the HPCSA that they acted for the member on the instructions of Medical Protection.

Unfortunately, unbeknownst to Medical Protection and the appointed attorneys at the time, the member had also sent his initial letter (in which he sought assistance and advice from Medical Protection), directly to the HPCSA. The HPCSA quickly reverted directly to the member, asking him to send them a picture of his practice and a picture of himself in a short-sleeved shirt. The member duly obliged, and sent photos of the practice, and a photo of himself wearing a biker’s vest, directly to the HPCSA. From a procedural standpoint, all correspondence, including letters and photos, ought to have been settled and sent to the HPCSA via the attorneys appointed by Medical Protection. Unfortunately that could not happen because the attorneys were only belatedly advised of these developments, and the member had acted before taking advice.

Despite the attorneys raising an objection regarding the admissibility of the member’s letter and photos for consideration by the HPCSA’s Preliminary Committee of Inquiry (the PCI), and despite assurances from officials at the HPCSA that these were removed from the agenda of the meeting of the PCI, to be postponed pending a formal letter of explanation submitted on the member’s behalf by the attorneys, the matter was nonetheless considered by the PCI, who made their decision based on the photos and letter submitted directly by the member to the HPCSA.

Professionalism…. Continue to page 17

Professionalism…. Continue from page 16

Outcome

Thankfully, despite the procedural irregularities, the HPCSA resolved to accept the member's letter of explanation, concluding that there was no evidence of unprofessional conduct.

Learning points

If you receive notification of a complaint from the HPCSA, the first thing you should do is note the deadline for submission of your letter of explanation and contact Medical Protection. It is strongly recommended that you avoid responding directly and personally to the regulator, but that you take professional independent advice before proceeding. There is no harm in simply acknowledging receipt of the HPCSA's correspondence and undertaking to respond in due course.

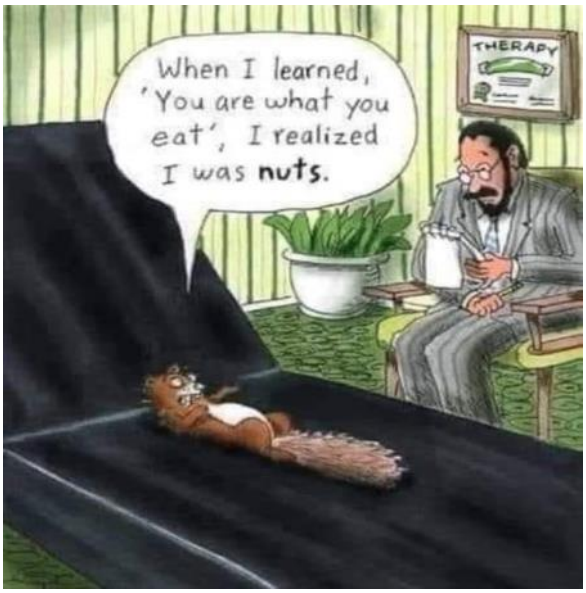
With that said, you are at liberty to prepare your response personally and send it directly to the HPCSA – there is nothing in law precluding you from doing so – but this is strongly discouraged. Firstly, you may be in breach of the terms of your contract of insurance (if you are indemnified by an insurer, which Medical Protection is not). Secondly, it is often difficult to prepare an objective, dispassionate letter when one is dealing with allegations of unprofessionalism against oneself. Having an objective set of hands assist in the preparation of the letter of explanation is recommended. With the oversight of a professional case manager or medicolegal consultant from Medical Protection, in collaboration with a qualified attorney, an objective, professional and well thought out response can be prepared.

In the above case, the outcome was favourable for the member. What we can read into the outcome is that the HPCSA committee that reviewed the matter did not hold the view that a dress code equates to professionalism or non-professionalism. This is a progressive decision and should be lauded. Perceptions of physical appearances are very subjective. In the matter in question, the practitioner had intentionally designed his practice to be rustic, and to represent an oasis in the desert, incorporating features of nature to create a feeling of tranquility, creativity and relaxation. He had in the past received many compliments from patients who described the practice as "homely", "artistic", and "calming".

Due to the subjective nature of physical appearances, it is perhaps no surprise that the HPCSA's rules are silent on dress codes. Being professional is not a matter of simply conforming to a dress code. Professionalism entails, among other things, upholding your duties to patients which include: acting in patients' best interests, respecting patients, getting informed consent before treating patients, respecting their confidentiality, allowing patients to participate in their own healthcare, being impartial towards patients, and providing access to healthcare. Although the practitioner in question did not have any tattoos, it is clear to see that a tattoo does not necessarily have any bearing on one's duties to patients. If a tattoo has the potential to disrespect a patient, then it probably should be covered up.

Professionalism is intertwined with community norms and standards. The latter changes over time. For example, in the past, one might find doctors exclusively dressed in white coats. In recent times, one is more likely to find them in scrubs.

So, while dress codes may change with the times, what remains constant are one's professional and ethical duties towards patients as healthcare practitioners. If you uphold your duties as set out in the HPCSA's rules and regulations, you are unlikely to be found wanting by your professional regulator. On the other hand, dressing smartly will not cover up unprofessional behaviour.



- END -

Sleep aids: Melatonin linked to reduced risk of self-harm in youth

- **Researchers analyzed the effects of melatonin use on self-harm in teenagers and children.**
- **They found that melatonin use decreased self-harm in young people, especially in adolescent girls with depression and anxiety.**
- **Further studies are needed to confirm these results and the possible benefits of melatonin for mental health and well-being.**

Sleep disorders such as insomnia are common among young people, especially those with psychiatric conditions.

According to some estimates, around 17% of youth engage in self-harming behavior. There are currently few empirically-supported treatments for the condition in youth.

A recent meta-analysis suggests that treating the causes of self-harm may reduce its incidence. Some have thus suggested that sleep problems may reduce the incidence of self-harm.

In Sweden, melatonin is the most commonly prescribed drug for sleep disturbances in children and teenagers. Melatonin is a naturally-occurring hormone that helps maintain the normal sleep-wake cycle and other biological processes.

Understanding more about how melatonin affects self-harm in children and adolescents could inform treatment options for the behavior.

Recently, researchers examined the risk of self-harm and unintentional injuries before and after melatonin treatment in youth with and without psychiatric conditions.

They found that melatonin treatment was linked to lower levels of self-harm—especially in adolescent girls with depression and anxiety.

Decreased risk of self-harm with melatonin

For the study, the researchers analyzed public healthcare data from 25,575 youths in Sweden who began melatonin treatment between ages 6 and 18.

The children and adolescents were followed for a year prior to melatonin prescription and a year following.

Melatonin linked to ....Continue to page 19

Melatonin linked to ....Continue from page 18

They began treatment at an average of age 13 years old, and most commonly initiated treatment in November. Treatment lasted for an average of 6.4 months.

The researchers found that 87.2% of melatonin users received at least one psychiatric diagnosis by age 18. Over 50% received an ADHD diagnosis. Self-harm was around five times more common in girls than boys.

In the end, the researchers found that melatonin use decreased the risk of self-harm by 42% and poisoning risk by 41%. Effects were especially prevalent among girls and adolescents with depression and or anxiety.

How melatonin may help mental health

"Melatonin, a natural hormone produced by the brain, helps regulate sleep-wake cycles and circadian rhythm. Sleep disturbances are common in young people who have psychiatric disorders, and sleep problems are also associated with emotional and behavioral impairments in childhood."
— Dr Kelly Johnson-Arbor

"Given that sleep problems can affect emotion and behavior, it's possible that improvements in sleep quality may result in improved emotional stability and behavioral control."
— Dr. Kelly Johnson-Arbor

"Because of this, the authors of this study aimed to investigate whether regulation of the sleep cycle, through the use of melatonin, could potentially help prevent self-harm, body injuries, and falls in young people between the ages of 6 and 18 years of age," she said.

Is melatonin safe to use during puberty?

"In animal studies, melatonin administration was found to both speed up and delay the start of puberty, depending on the animal species. Melatonin administration may alter the brain's production of hormones, including the gonadotropin-releasing hormone, which regulates puberty in humans," she said.

"Melatonin may also alter the process of female reproductive organ development. However, multiple human studies involving children who were administered melatonin over prolonged periods of time have not shown adverse effects on puberty," she added.

Limitations

Dr. Lokesh Shahani, associate professor of psychiatry at McGovern Medical School at UTHealth Houston, who was not involved in the study, said:

"The study used a national register to extract patient diagnosis, prescription, and death records, leading to some missed cases. Further, the effect of other sleep aids and their impact on suicidal behavior was not investigated in this city."

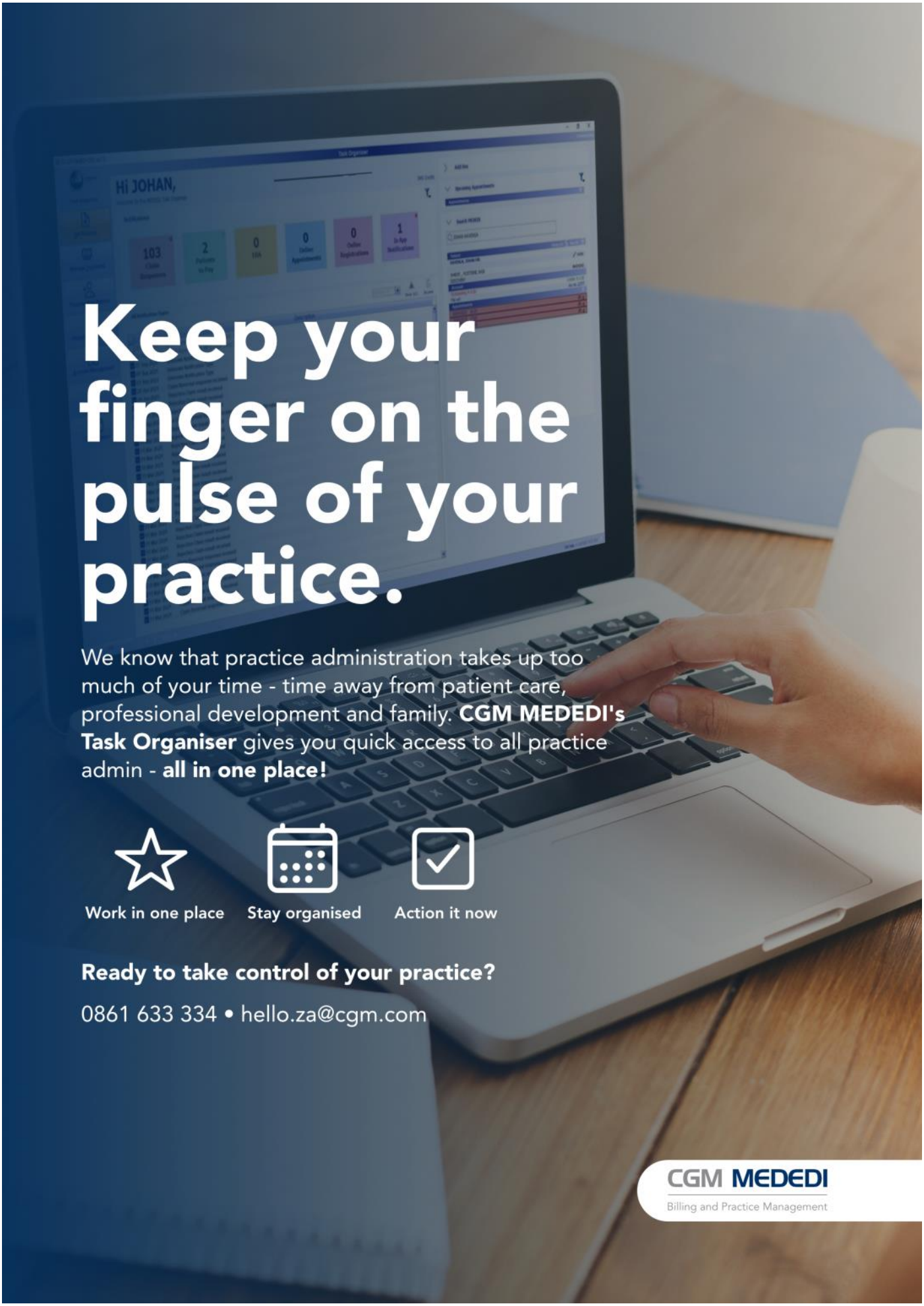
Dr. McGrath added that as many patients in the study were also taking antidepressants, it's possible that the results may have been affected by their use.

Optimal dose of melatonin still not clear

When asked about the study's implications, Dr. Johnson-Arbor said the findings "indicate that children with sleep disorders may experience additional benefits, other than sleep regulation, after the use of melatonin."

"Additional studies are needed to determine whether the results of this study can be applied to other populations and to confirm the optimal dose and duration of use of melatonin needed to achieve the results found in this investigation," she said.

- END -




S2 Gen-Payne
CAPSULES
Analgesic
Antipyretic and
Anti-inflammatory
Contains paracetamol
Read package insert
adcock ingram
DISINTEGRATE
PAIN
Pain • Inflammation • Fever
Gen-Payne®
CAPSULES
S2 Gen-Payne® Capsules. Each capsule contains: codeine phosphate 10 mg; ibuprofen 200 mg; paracetamol 250 mg. Reg. No. 35/2.8/0046. For full prescribing information refer to the package insert approved by the medicines regulatory authority. Adcock Ingram Limited. Reg. No. 1949/034385/06. Private Bag X69, Bryanston, 2021. Tel. + 27 11 635 0000. www.adcock.com 202002051013120
adcock ingram

Gems hauled to court over 'irregular' pharmacy contract

The Government Employees Medical Aid Scheme (Gems) has been taken to court for allegedly awarding a R4.5-billion pharmaceutical courier contract to a "start up" company linked to pharmaceutical company, AfroCentric Group, without following due processes.

In court papers filed at the North Gauteng High Court, Pretoria-based pharmaceutical company, Dely Road Courier Pharmacy, accused Gems of awarding the contract to Marara Pharmacy, which entered into a "questionable joint venture" with Pharmacy Direct, a subsidiary of Afrocentric Group, without following due process.

Marara would pocket R900-million a year over five years, according to the tender, for rendering courier services. The court papers highlighted that Pharmacy Direct, which has a 30% stake in the Marara Pharmacy contract, is 100% owned by AfroCentric Healthcare Assets, whose four subsidiaries already render services to Gems.

Mogologolo Phasha, Dely Road Pharmacy director, has asked the high court to set aside the joint venture and order Gems to award the same contract to Dely Road Courier Pharmacy.

He argued in his application that the contract had been awarded irregularly because Marara Pharmacy was only registered with the South African Pharmacy Council 20 days after it got the contract.

The council is a statutory entity tasked with regulating the pharmaceutical industry in South Africa.

Phasha argued in his court papers that on May 12, 2021, he learned that Gems had issued a request for bids for the appointment of a service provider who would render courier services relating to the pharmaceutical business.

He said various companies submitted their bid for the courier tender before the July 9, 2021 closing date. These included his company and Marara Pharmacy.

Gems hauled .... Continue to page 25


CGM MEDEDI
Billing and Practice Management
+
Practice PERFECT
THE PERFECT PAIR
A centralised practice toolkit plus EHRs for a fully paperless practice.
www.cgm.com/za-perfectpair
Practice marketing
Online bookings
Patient onboarding
Video consults
Advanced e-Scripts
Easy payments
Medical billing
Electronic health records
Ready to take control of your practice?
Contact us on 0861 633 334 • hello.za@cgm.com

Do you worry about your patients' treatment adherence?

For peace of mind, keep patients close. Now your practice can do more to support better clinical outcomes.

Join our MediLogistics Doctor's Network to offer your patients the convenience of collecting their chronic medicine from your practice each month. We partner with healthcare practices to establish this service at no cost to your practice or patients while fulfilling a crucial need in many communities for which practices are reimbursed.

Medipost Pharmacy prepares the patient-ready parcels which MediLogistics delivers to practices for collection. With our reliable and professional service, MediLogistics assists doctors to optimally support patient wellness and grow practice loyalty.

For more information

info@medilogistics.co.za
012 426 4918
www.medilogistics.co.za

Medi Logistics

Logistical precision and pharmacy expertise unite to deliver on time, every time.

Gems hauled .... Continue from page 22

"The successful bidder would render the services for a period of one year, commencing on January 1 2022. The period of one year would be renewable annually for a maximum of four additional years. As such, the 2021 tender envisaged a maximum period of five years," said Phasha.

The court application comes a few months after Afrocentric Group was accused of capturing Gems through officials who gave its subsidiaries unfettered powers to adjudicate and irregularly award multimillion rands tenders to their sister companies. The accusation came after it emerged that Gems allegedly awarded a dodgy R600-million multivitamins contract to Medscheme, a subsidiary of Afrocentric Group, in December 2021.

Phasha said upon learning that the Gems Tender Adjudication Committee had recommended Marara Pharmacy for appointment, he made inquiries about the company and discovered that it was registered on July 30, 2021, three weeks after the tender application was closed.

He added that Gems had cancelled the tender on October 21 2021, following the discovery of Marara Pharmacy's registration defects. Marara Pharmacy, through a joint venture with Pharmacy Direct, a retail arm of the AfroCentric Group, was later awarded the tender in August 2022, almost a year after it was cancelled.

"I was not familiar with the entity called Marara. I therefore decided to make my own inquiries about it. I discovered that Marara was only registered with the Council on July 30 2021 as is evident from Marara's registration records.
"Marara's registration was of course after the bid closing date for the 2021 tender. This printout was extracted from the website of the council. I verily believe that the board became aware of the defect in Marara's registration during or about October 2021," said Phasha.

Phasha said the Gems board was forced to cancel the tender. However, he believes that cancelling the tender was not enough. His application is therefore aimed at getting the board to appoint one of the bidders whose papers were in order, especially his own courier company.

"As is evident, Gems cancelled the 2021 tender after the discovery of Marara's registration status.
"I verily believe that Gems elected to cancel the 2021 tender as opposed to awarding it to the other entities which met the bid requirements so as to re-issue the tender so as to give it to Marara, which is now registered, albeit unlawfully," Phasha said.

Phasha said true to his suspicions, Gems issued another request for bids four months later, with an April 11, 2022 closing date.

"The successful bidder would render the services for a period of one year commencing on 1 January 2023, which one year period would be renewable annually for a maximum of four additional years.
According to the application, there was a lot of back-and-forth, which resulted in Marara being appointed as part of a joint venture.

"To the extent that Marara carried itself out as a pharmacy when it was not entitled to render the services … such conduct would constitute a criminal offence.

Gems hauled .... Continue to page 26

Gems hauled .... Continue from page 25

"It is clear the purported joint venture was established solely for the purpose of enabling Marara to utilise the background and experience of Pharmacy Direct.

"The joint venture is comprised of Marara Pharmacy with participation ratio of 70% and Pharmacy Direct with 30%," said Phasha.

He added that Marara pharmacy also provided the name of an intern who was registered in February 2020 after completing her degree. He said the intern completed the internship in January 2021, six months before Marara was registered as a pharmacy.

Phasha further argued in his court papers that Gems had strict requirements for the companies that wanted to bid for the tender.
Among the requirements was proof of a valid accreditation with regulatory bodies in line with legislation.

"Bids submitted without the required proof of accreditation would be deemed to be non-responsive," he said.

Among other strict conditions, was that each bidder must prove that they had rendered similar services before, he said in court papers.

He added that the Gems bid conditions were clear that they needed the experience of the company, "not that of your team members" to avoid a situation where inexperienced start-ups go out to hire experienced personnel to use them for their bids.

Marara Pharmacy CEO Elias Mpolaene Monhla referred enquiries to a company spokesperson, only known as Gwabi, who did not respond to Sunday World's questions.

However, it is understood that Marara intends to oppose the application after receiving legal advice.

Gems and Afrocentric said they were unable to comment because the matter is before the court. "This matter is before the court for consideration, and Gems is not in the position to comment until the matter has been heard fully by the court," said Gems chief marketing officer Dr Phumelela Dhlomo.

Marara Pharmacy CEO Elias Mpolaene Monhla referred enquiries to a company spokesperson, only known as Gwabi, who said: "We have only recently received the papers and are in the process of consulting our legal representatives. We intend to oppose the application and we will file papers recording our formal response in due course at court, when our version will be in the public domain. To respond in newspapers whilst we are in the process of obtaining sound legal advice will be premature and inappropriate. All our rights remain strictly reserved."

- END -

Letters sent to POLMED to improve their data capturing

QualiCare
Boland Bank Building, 5th Floor, Suite 501, 18 Lower Burg Street, Cape Town, 8000
PO Box 15633, Vlaeberg 8018
Tel: (021) 426 4777 Fax: (021) 426 5502
E-mail: tony@cpcqualicare.co.za
Website: www.docweb.co.za

Attention: [redacted]

Per email
08 February 2023

RE: Difficulty with Polmed GP Nomination Form

Dear J[redacted]

I hope that this letter finds you well.

It appears from numerous of our members, and complaints logged by our Qualicare C consultants that the Polmed GP Nomination Forms which are being sent to Polmed, are not being captured in time. As a result, doctors continue to see patients in good faith as their designated provider, but because the forms nominating that doctor are behind in capturing, they are remunerated with out of area fee.

Our members are therefore resorting to phoning the GP nomination through to Polmed, but no proof exists of this telephone call.

We therefore appeal to you to improve your data capturing of information and bring this up to date or provide the doctors with a telephonic receipt or reference for their call to 0860 765 633. (Polmed telephone number for GP Nominations)

Yours sincerely,

Dr. AD Behrman
CEO – CPC/QualiCare
Director of IPAF and
Past Chairman of the SAMCC
Cell: 083 270 7439

1

CPC DOCTOR'S FUND (PTY) LTD T/A QUALICARE
Directors: Dr S Lison, Dr AD Behrman
Reg No 95/03533/07 (Vat No 470175882)

Polmed GP Nomination ....Continue to page 28

Polmed GP Nomination ….Continue from page 27

QualiCare
Boland Bank Building, 5th Floor, Suite 501, 18 Lower Burg Street, Cape Town, 8000
PO Box 15633, Vlaeberg 8018
Tel: (021) 426 4777 Fax: (021) 426 5502
E-mail: tony@cpcqualicare.co.za
Website: www.docweb.co.za

Attention:
[redacted]

Per email
23 February 2023

RE: Ongoing Difficulty with Polmed GP Nomination

Dear [redacted]

I write to you again, since my last letter of 08 02 2023 to which I have not received a reply nor acknowledgement.

Subsequent to my letter, we were informed that there was indeed a problem within Polmed with regard to processing the forms you had received from members nominating GPs s their DSP.

As a result, many doctors who were duly nominated, are now being underpaid as non network, or their patients are being penalized by Polmed attributing the consultations to " out of area", when , in fact , the error is within Polmed itself.

I am sure that you will agree that this is unfair and should be reversed and the claims reprocessed.

Please will you respond to this complaint from numerous of my members as I will need to publish it in the Qualicare newsletter for March 2023.

Our members are therefore resorting to phoning the GP nomination through to Polmed, but no proof exists of this telephone call.

We again appeal to you to improve your data capturing of information and bring this up to date or provide the doctors with a telephonic receipt or reference for their call to 0860 765 633. (Polmed telephone number for GP Nominations)

Yours sincerely,

Dr. AD Behrman
CEO – CPC/QualiCare
Director of IPAF and
Past Chairman of the SAMCC
Cell: 083 270 7439

1

CPC DOCTOR'S FUND (PTY) LTD T/A QUALICARE
Directors: Dr S Lison, Dr AD Behrman
Reg No 95/03533/07 (Vat No 470175882)

Extended consultation (XCONS) is only payable to the Premier Plus GP who registered the member on the Diabetes Care programme.

Extended consultation (XCONS) is only payable to the Premier Plus GP who registered the member on the Diabetes Care programme

Monthly management fee will only start once the member has had a follow-up consult and the metrics are captured on HealthID

Additional info:

This GP R893.10 XCON consultation fee (once a year) applies to ALL DH plans (Smart Plan included) AND the DH Administered Schemes.

The exception is KeyCare Fee-For-Service GP's:

Dispensing: R833.30;

Non-Dispensing: R724.20

Capitation GP's:

Dispensing: R606.60;

Non-Dispensing: R552.00

Instead of the 0190 code, one bills: XCON with the relevant ICD-10 code.

Scientists may have found the 'immunity' secret to living to 100

- **As human life expectancy has increased, so has the number of people living to 100 years of age or older.**
- **Researchers have found that centenarians have a unique immune cell composition and activity, giving them an immune system that helps them live longer.**
- **Scientists believe these findings may be used to develop healthy aging therapeutics.**

The life expectancy of humans on our planet has more than doubled since 1900. Global life expectancy has increased from 31 years in 1900 to 73.2 years in 2023, and is expected to further increase to 77.1 years in 2050.

Living to 100 …. Continue to page 31

Living to 100 .... Continue from page 30

Also increasing is the number of people reaching the age of 100 or more. Known as centenarians, researchers estimate there were about 450,000 centenarians globally in 2015, with that number projected to increase to 3.7 million in 2050.

Previous research in the early 2000s estimated that globally, the number of people living to 100 years or older would more than quintuple between 2005 and 2030.

One thing still unknown is what allows some people to live into their 100s, while others do not.

Led by researchers from Tufts Medical Center and Boston University School of Medicine, a new study is helping to answer this question by finding that centenarians possess a unique immune cell composition and activity, giving them a highly-functional immune system and allowing them to live longer.

Scientists believe these findings could be used potentially to develop healthy aging therapeutics.

What happens to our Immune system as we age?

As we age, all parts of the body experience changes, including the immune system.

According to Dr. Scott Kaiser, a geriatrician, and director of Geriatric Cognitive Health for the Pacific Neuroscience Institute in Santa Monica, California, there are two main concepts when it comes to how the immune system changes as we get older.

"One is immunosenescence and that's the age-related process of immune dysfunction," he explained.

"So changes in our immune system composition and function over time can lead to poor immune function in older people. And that's closely related to people's vulnerability to infection, autoimmune disease, and even various types of cancer," he said.

"And then there's this issue of inflammaging, which is a term that's been used to describe age-related increases in inflammation because of high levels of pro-inflammatory markers in the blood and different tissues in the body. That's a strong risk factor for all sorts of diseases, including neurodegenerative processes like Alzheimer's disease, for example," Dr. Kaiser continued.

"So there's a lot to look at in terms of the immune function over time and how our immune systems changes with age may either make us more vulnerable or protect us," he added.

Living to 100 .... Continue to page 32

Living to 100 .... Continue from page 31

Examining an 'elite' immunity

According to Dr. Tanya Karagiannis, a senior bioinformatician at the Center for Quantitative Methods and Data Science in the Institute for Clinical Research and Health Policy Studies at Tufts Medical Center, and lead author of this study, she and her team decided to study the immune systems of centenarians because with age comes changes in our immune systems including in their function and cell makeup, and these changes can lead to aging-related diseases.

"Many centenarians experience delays in the onset of aging-related disease and this suggests the presence of an elite immunity that continues to remain highly functional even at extreme old age," she told Medical News Today.

For this study, researchers performed single-cell sequencing on a category of immune cells called peripheral blood mononuclear (PBMCs) from blood samples taken from seven centenarians enrolled in the New England Centenarian Study.

"We used single-cell data and applied new computational methods to analyze immune cells that circulate through the immune system across the human lifespan. We looked at differences in the presence of specific immune cell types across younger ages and extreme old age and found cell type-specific changes in aging and extreme old age," Dr. Karagiannis explained.

"We also took the same cell types and explored the differences in gene expression across ages to discover different gene expression patterns of extreme longevity that change with age but also are unique to extreme old age," she added.

Unique cell types in centenarians

Upon analysis, the researchers confirmed observations made in previous studies of aging that identified unique cell type-specific compositional and transcriptional changes only found in centenarians that reflect normal immune response.

They also found centenarians had cell type signatures specific to exceptional longevity in both genes with age-related changes and genes expressed uniquely in centenarians.

"We were not as surprised to find genes that change with age in centenarians since they are an aging population. What was surprising was the different aging patterns we identified including genes that were aging-specific in which expression levels changed with age but not in extreme longevity across various cell populations," Dr. Karagiannis said.

"Our findings can provide a foundation to explore potential drivers of extreme old age that could lead to the discovery of healthy aging therapeutics. We would like to explore longitudinal changes in immune cells of centenarians and younger aged individuals to help better define the protective drivers of extreme longevity that provides the beneficial health outcome observed in these individuals," she continued.

Living to 100 .... Continue to page 34

Living to 100 .... Continue from page 32

New therapies for aging-related diseases

After reviewing this study, Dr. Kaiser told Medical News Today he found this study interesting as it actually looked at people who have aged extremely well, who have defied age, so to speak, and then looked at what's going on in them to see if we can learn anything.

"The potential lessons here are in what makes us more resilient," he explained.

"Looking at these people who had extreme longevity, living into 100s and even beyond, and figure out what is the nature, what is the characteristic of their immune system so that we could better understand what might be going on, and then figure out how that could be translated into potential therapies for other people, so that more people can enjoy that."
— Dr. Kaiser

MNT also spoke with Kathleen Cameron, senior director of the National Council on Aging's Center for Healthy Aging, about this study.

She said understanding the immune changes that come with aging is important to help people live longer. And a lot of people want to live longer if they can also be healthy.

"If we can determine what is creating this immune resilience for those who live over 100, that can lead to treatments that can help people live longer. Or, if there are certain healthy behaviors that lead to this resilience, that would also help us," Cameron continued.

However, she said this is all very preliminary research, as this study was small, and it should lead to other studies to help healthcare practitioners better understand this immune resilience.

"More research is needed to understand the effect these immune patterns have on longevity. Is there something in the centenarians' family history or other things that happened in their life, exposure to certain things that might have changed their immune system? We don't know that from this study. Knowing more about this could lead to new therapies or new ways to improve the immune system."
— Kathleen Cameron

- END -

GRID Express
MEDICAL SCHEME CLAIMING
SINCE 1984

Your SOLUTION
to administrative headaches

Our multifaceted team at Grid Express would like to take all the time consuming tasks in your practice off your shoulders, together with the IT responsibilities that go with it.

- ✔ Improved cash flow and dramatic savings on administrative follow-up costs
- ✔ FULL medical scheme reconciliation
- ✔ Monthly financial & statistical reporting

0861 474 339 (0861 GRID EX)

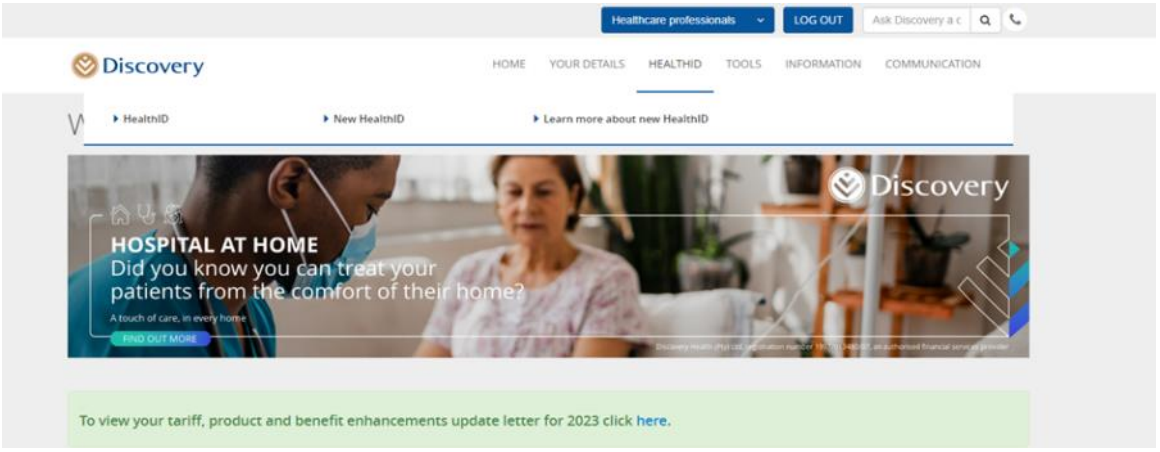
www.gridexpress.co.za

Discovery Corner - Your questions answered

HealthID 2.0 PROBLEMS:

Please note there are no new Webinars that took place - therefore no recordings available. Hereby a link to refer doctors to, for more info on the XCONS, HealthID, etc.

Please see below screen shot:
Once the Dr logs in to our website and click on HealtHID the below will appear



Then Dr can click on Learn more about new HealthID

In general DH knows there are unfortunately various issues coming up on almost a daily basis. The DH Team who are solely concentrating on new developments, stopped their work to ÓNLY work on fixing this platform as quickly and efficiently as possible. All they can do is say that, all the effort is being made & time frame of 6 weeks to resolve.

DH is asking doctors to please bear with them to deal with this, thanks.

PRACTICE MANAGEMENT…

1. GP fees versus Family Physician fees

Q: GP fees versus Family Physician fees: A GP wants to know: Why does the Family Physician get a higher fee than the GP? Both do the exact same, or does the Family Physician do something "special" with his/her patients to get the higher fee? He doesn't understand that there is a title difference due to a course done.

Feedback from Discovery: The Specialised Family Medicine (family physicians) practitioners have a master's degree in family medicine, which is recognised by the Health Professions Council of South Africa (HPCSA) as a specialist.

The patient makes the choice to go to a specialist physician and fees are more (higher qualification)

2. Fee for Family Physicians?

Q: Discovery pays R707.30 for 0190, but LA Health only pays R544.10?
Feedback from Discovery: The Specialist Family Medicine GP Network is only applicable to Discovery Health Plans. All the In-House schemes are excluded from this agreement. The Discovery GP Network rates would apply to LA Health as per the 2023 list. The Specialist Family GP Network Rate also does not apply to KeyCare; Normal KeyCare GP rates will apply.

Discovery Corner….Continue to page 37

Discovery Corner….Continue from page 36

3. Fee for Family Physicians?

Q: Our Dr's cannot apply to become part of the Discovery Smart Plan Network option, but must be invited by Discovery, after we first meet a certain % to web-based work.
Practices, as you know, already have so much administration work and are not funded & trained to use their websites, staff must learn the program themselves, for which there is little time available.
It's the same as having to write a test without having attended class! We lose patients this way, as it is a much more affordable option.
Can it not be reviewed please? Drs don't work for medical funds, but for patients!
Feedback from Discovery: DH's Accounts Manager spoke to the practice manager and they made an appointment for HealthID training.
She also explained to the practice manager that the Smart Plan is a digitally enabled plan and that is why DH can only invite high digital users to the Smart Plan GP Network - Smart Plan has a lot of digital benefit.

4. Discovery Smart Plan

Q: A patient nominated Dr X for Discovery Smart Plan. The practice mentions that they will be paid R60 – R115 for GP consultations? Is this true – They feel it is too little. Do Dr X háve a contract for this plan/option?
Feedback from Discovery: Dr X is nót on the Smart Plan GP Network. Should a Smart Plan member consult with this practice the claim will reject and be for the members liability.
For Practices that are contracted into Smart Plan GP Network
Should the member consult with a practice that is on the Smart Plan GP Network, there is a co-payment of R60 that applies for Classic Smart Plan members, for each visit and the balance of the consultation fee will be covered up to the Discovery Health Rate
A R115 co-payment applies for Essential Smart Plan, for each visit and the balance of the consultation fee will be covered up to the Discovery Health Rate.

5. DH Keycare: Problems getting authorization no.'s in time (Referral to specialists)

Q: The pr. of Dr Y, has the following complaint:
Previously it was no problem getting an authorization no (for a referral to a specialist) in time for DH Keycare patients, BUT… Since end of 2022 & this year, various patients have missed their appointments with specialists as the auth no.'s were NOT received in time?
The practice as well as the patient though do get a 'admission' notice, BUT it takes SO LONG to get the auth no! **Could you PLEASE investigate this?**
Feedback from Discovery: (Re: Specialist referral query)
DH's Accounts Manager apologised for not closing the loop. 'I called the rooms.
The front desk lady admitted that they submit paper forms for the specialist referrals, to which I confirmed the turnaround time.'
The practice can also make use of HealthID to request the specialist referrals. The feedback for online referral is immédiate unless the request needs further review by a panel at Discovery, then feedback may take two to three working days. (Paper forms take much longer!)
'I have assured her that if she gets stuck, she can always contact me for assistance.'

6. Dr NOT listed as being on the DH GP Network?

Q: Patient: 'Dr Z was registered on the Discovery Health GP Network which allowed me the benefit of my consultations for repeat scripts of my chronic medication to be paid by the Scheme and not from my Medical Savings. As such I today amended my details on the Discovery Health website to nominate Dr Y as my primary Care Doctor. However, I have noted that she is not listed as being on the Discovery Health GP Network - see screenshot below: Can you please advise if this is an error on the Discovery side and if so, can it be amended. Alternatively, I will have to move my medical records to a GP that is on the Network as soon as possible.'
Feedback from Discovery: DH's Accounts Manager: 'I have checked and confirm that Dr Z is on the GP Network and a Premier Plus GP. The error is on the website where it confirms that Dr is not a network provider even though they are. I experienced the same on my personal capacity. But I know that IT Team aware of the issue and we will know once resolved. I have notified the practice of the issue and confirmed that Dr is registered on the network.'

Discovery Corner….Continue to page 38

Discovery Corner….Continue from page 37

Discovery

GENERAL INFO:

Disease Control: Members identified developing Diabetes – New Care Program opened for these patients. Doctors will need to go into the care program screen and need to register the patient; the Care Program will list which one the patient qualifies for. Diabetes Care/ Cardio Care/ HIV Care/Mental Health/Disease Prevention.

WealthFund: Dr's can sign up on Vitality to do this.

FlexiCare: At the moment, the doctor's patient numbers are low. The day to day aligns with KeyCare.

Premier Monthly management Fee: during all the problems with HealthID2 they are aware of the issues, they have made sure the doctors got paid according to the patient records off both HealthID1 & 2 and paid the doctors so that DH is not behind with this. Some patients pulled through on both lists and DH paid for Jan and Feb 23 – this payment only went through in the 1st week in March 23. The Feb payment went through this week. The doctors who already received payment was left out on the following payment as they already received the payment.

XCONS

Extended consultation (XCONS) is only payable to the Premier Plus GP who registered the member on the Diabetes Care programme.

Monthly management fee will only start once the member has had a follow-up consult and the metrics are captured on HealthID

Additional info:

This GP R893.10 XCON consultation fee (once a year) applies to ALL DH plans (Smart Plan included) AND the DH Administered Schemes.

The exception is KeyCare Fee-For-Service GP's: Dispensing: R833.30; Non-Dispensing: R724.20

-Capitation GP's: Dispensing: R606.60; Non-Dispensing: R552.00

Instead of the 0190 code, one bills: XCON with the relevant ICD-10 code.

HealthID benefits:

The use of HealthID is a requirement before a GP can be considered for the other network, e.g. Smart Plan Network, Website and HealthID registration

HealthID is a digital tool for Healthcare Professionals to gain fast, up-to-date access to their patients' health information. This facilitates efficient coordination of patient care and enables doctor-patient interaction. HealthID encourages adherence to best-practice and has functionality that assists in simplifying and streamlining doctor-patient interaction.

HealthID benefits:

Provides a complete view of patient's medical information, including their Electronic Health Record, prescribed medication, pathology results and hospital admissions

Reduces the likelihood of serious medical error or duplication when providing healthcare services

Enables administrative efficiencies by providing the following via digital functionality:

Chronic Illness Benefit (CIB) applications

- KeyCare specialist authorisations
- Loading bureaus under the practice profile
- Note: All HealthID engaged doctors also get to enjoy the benefits of additional payment for accessing HealthID during their consultations with our members.

HealthID is available through the following platforms:

App Store for iPad - The HealthID app is free to download though data charges will apply for app usage

Discovery website on www.discovery.co.za

Certain Practice Manager Applications (PMAs):

- HealthOne/Elixir
- GoodX
- Practice Perfect
- MyMPS (HealthBridge)
- Etc.

Invitation to Dentists, Physiotherapists and Allied Health Care Professionals to become an Associate Member of CPC/Qualicare

Dear Colleagues,

As we approach the new era of increased Government involvement in Health Care Delivery, we anticipate an increase in the speed of implementation of NHI. Holding membership of the CPC/Qualicare Network, the largest and most widely representative Medical Network of Healthcare Providers in the Western Cape comprising Doctors, Dentists and Allied Health Care Professionals alike will, we believe, stand you in good stead as Government looks to setting up the new Health Care Delivery system for South Africa.

Associate membership of CPC/Qualicare offers you the following opportunities:

- Full access to our Monthly newsletter in electronic format.
- Free advertising in our monthly newsletter of your practice related information (max 200 words).
- Free advertising for a locum service, with no commission charges payable.
- Reduced fees to attend all our CPC/Qualicare functions, at Associate Member's rate. (Approximately 30% lower than non-members rates)
- CPC/Qualicare is committed to providing our members & shareholders with all of their CPD requirements each year. Associate members receive reduced cost of CPD offerings and other CME offerings compared to non-member rates. (Approximately 30% lower than non-member rates).
- Free listing your practice as part of CPC/Qualicare's Western Cape Electronic Network. your practice will be listed as part of CPC/Qualicare at no charge. (Worth R7000.00 per annum)
- 2 Free stationary items worth R150.00 per month in the form of 1 Prescription pad - 100 leaves, 1 Sick certificate pad - 100 leaves and the ability to purchase further stationery at 30% below current market prices.
- Preferential rates on certain Practice management software systems depending on vendor.
- Inclusion into the CPC/Qualicare Mass email service to receive important health care updates.
- Certain personal banking offerings from commercial banks.
- NHI future possibilities for your practice…. Watch this space as NH I start to roll out!!!
- Preferred wholesalers and facilitation of opening new accounts with them.
- Assistance with registration of an Integrated Pollution and Waste Information System IPWIS off the Western Cape Government.
- Assistance with late medical aid payments, claw-backs, and withholds, as well as advice on practice admin and responses to forensic investigations.

Cost of Associate Membership

- Dentist R332.00 VAT inclusive, per month
- Allied Health Care Professionals R332.00 VAT inclusive, per month

All fees payable by debit order only. Minimum membership period is 12 months with a 3 month notice period thereafter.

Please note that we have additional benefits for a NEW MEMBER / **FIRST-TIME PRACTICE OWNER.**

Should you be interested in this offering, please email Louna at pa@cpcqualicare.co.za and one of our 5 consultants will make contact with you shortly.

Warm regards,

Dr. Tony Behrman, CEO of CPC/Qualicare
Dr. Solly Lison, Chairman of CPC/Qualicare

Qualicare Electronic Doctor Network.
A free gift (valued at R7,500.00 per year) only for CPC/Qualicare Members and Shareholders!!

Our **highly successful electronic doctors network** see www.qualicaredoctors.co.za has rapidly expanded across the Western Cape Province, and to date has approximately 200 doctors.

As a Member or Shareholder you are still entitled**, at NO charge**, to list your practice on the "EDN" showing your name, practice name, GPS coordinates, areas of special interests, and any specific features which you would like to bring to the attention to prospective patients then please complete and return the form below at your earliest convenience should you be interested to join the growing network.

This is a limited offer open only to Shareholders and Members which is worth over R7500.00 per year and is brought to you as a member or shareholder benefit at no charge.

Practitioners Details * Compulsory to complete – for a successful listing

*First Name: _____

*Surname: _____

*Professional Degrees e.g. M.B.ChB._____

_____

Professional Body Memberships: _____

_____

*HPCSA Number:_____

*Board of HealthCare Funders PCNS Number: _____

DOH Disp Lic Number (if applicable):_____

Areas of Special Interest and Focus: e.g. Paediatrics, Bariatrics, Occupational Health: _____

_____

Contact Details

*Contact Number: (Practice)_____

*Email Address: _____

*Alternative Number: _____

Fax number: _____

Practice Details

*Practice Name: _____

Group PCNS: _____

*Practice Address: _____

_____

GPS Location: _____

Qualicare EDN … Continue to page 43

Qualicare EDN … Continue from page 42

Please also provide:

1. Photo of yourself - So that the patient can familiarize themselves with the Dr they are going to see

2. Photo of the outside of the Practice – So the patient will recognize the correct building and know what to look out for when coming to visit the practice

3. A short bio – interests, hobbies & education – This gives the patient some trust as they will feel they know you and will feel at home

Please forward the completed form and if you have any questions – please feel free to contact Yvette Du Bruyn CPC/ Qualicare Consultant at yvette@cpcqualicare.co.za

Alternatively click on the link to complete the form: https://www.qualicaredoctors.co.za/new-form/

I permit CPC/Qualicare to list my name, surname, the name of my practice, my practice details, and further details provided by me in this application, and my GPS Coordinates on the "Electronic CPC/Qualicare Doctor Network" at no cost to me or my practice (tick the appropriate block).

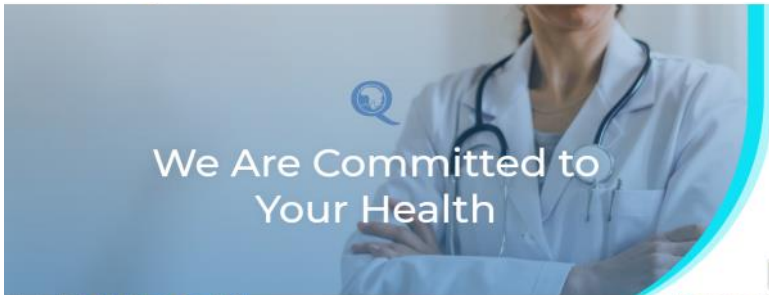
Yes I do agree to the above, in terms of POPIA Act 4 of 2013

☐

No I don't agree to the above

☐

Please forward your responses to Yvette Du Bruyn at yvette@cpcqualicare.co.za



Disclaimer:

The entire contents of the CPC/Qualicare Newsletter is based upon the latest and most up to date information at the time of sending.

Due to the fluency of the situation, information changes daily. Please visit our website for more updated information.

This Newsletter is subject to the provisions of the Protection of Personal Information (POPI) Act (Act 4 of 2013), as well as the General Data Protection Regulations of the European Union (GDPR EU). The content of this site and/or attachments, must be treated with confidentiality and only used in accordance with the purpose for which they are intended.

Neither CPC/Qualicare (PTY)LTD or CPC Holdings (PTY)LTD, their Directors & staff accept any liability whatsoever for any loss, whether it be direct, indirect or consequential, arising from information made available in this Newsletter or actions resulting therefrom. Any disclosure, re-transmission, dissemination or any other use of this information is prohibited.

Images & Articles:

https://i1.wp.com/grandly.org/wp-content/uploads/book-flipping.jpg?ssl=1
https://jamanetwork.com/journals/jama/fullarticle/2803077 : https://1.bp.blogspot.com/-JVZQZlmJUmk/Xh76Fua5kUI/AAAAAAAAAP8/bxc8628K-HE54EmKkzCxI6VfMBOad3OBQCLcBGAsYHQ/s1600/Blog%2Bcovers%2B%252818%2529.png : https://static.wixstatic.com/media/f56b3f_e8111bc1c7224e1e9260287c00c65d6e~mv2.jpeg/v1/fit/w_600%2Ch_458%2Cal_c%2Cq_80/file.jpeg : https://psychologychartered.co.uk/wp-content/uploads/2017/11/mental-1389919_1280-768x488.png : https://i0.wp.com/bdtechtalks.com/wp-content/uploads/2022/06/large-language-model-logical-reasoning.jpg?ssl=1 : https://0901.static.prezi.com/preview/v2/hlcjn35djqwfuzjp757fos7pkh6jc3sachvcdoaizecfr3dnitcq_3_0.png ; https://miro.medium.com/v2/resize:fit:1100/0*0xEhL-s3VE18RB4W : https://www.exchangewire.com/wp-content/uploads/2017/05/Google-Twitter-Logos.jpg ; https://th.bing.com/th/id/R.47908bb84f1481cef655cc3094e5c79e?rik=mCZ5yBY%2bBvKQrg&riu=http%3a%2f%2fglasbergen.com%2fwp-content%2fgallery%2fhealthcare-cartoons%2ftoon-3602.gif&ehk=YhNLtXWSPs6asVt39NL6Dcf3q87DRHNwi2g6D3EtNb4%3d&risl=&pid=ImgRaw&r=0

Article:https://www.medicalnewstoday.com/articles/cleaning-chemical-tce-may-cause-parkinsons-disease : https://insights.workwave.com/wp-content/uploads/2020/05/cleaning-lady-with-a-bucket-and-cleaning-products-picture-id870219332.jpg : https://psychology-spot.com/wp-content/uploads/2017/11/anxiety-dizziness.jpg : https://cdn.shopify.com/s/files/1/0257/1046/0991/articles/Tension_headache_2840x.progressive.jpg?v=1587659512 : https://i.pinimg.com/originals/b2/98/4d/b2984da6f3765da29634ddc65e3ef9df.jpg : https://jimmyscleaners.net/wp-content/uploads/2020/06/6165.jpg : https://th.bing.com/th/id/OIP.HwsVafxTjz0wF1IBTXvCswHaE8?pid=ImgDet&rs=1 : https://images-eu.ssl-images-amazon.com/images/I/41SgIXvPUGL._QL70_.jpg : https://th.bing.com/th/id/OIP.bEMZ6F39Z_veF_2SxIL8zAHaHa?pid=ImgDet&rs=1 : https://i.pinimg.com/736x/51/d9/15/51d915f2ab390d1f5a2e2ddeab0bdbb6--field-trips-funny-things.jpg : https://image.slidesharecdn.com/pharmacotherapyofalzheimersdisease-160626112440/95/pharmacotherapy-of-alzheimers-disease-1-1024.jpg?cb=1466940390 :

Article: https://www.medicalprotection.org/southafrica/casebook-and-resources/case-reports/case-reports/professionalism-is-not-a-dress-code-rsa ; https://th.bing.com/th/id/OIP.I13DtPlWRSD7qKeiSlpHfgHaD7?pid=ImgDet&rs=1 :

Article: https://www.medicalnewstoday.com/articles/sleep-aids-melatonin-linked-to-reduced-risk-of-self-harm-in-youth#Is-melatonin-safe-to-use-during-puberty? : https://i5.walmartimages.com/asr/68898b62-02e2-47ab-8323-7af01d12b4d6.06d65e0dcd1c6761456708600ec06b9a.jpeg?odnWidth=1000&odnHeight=1000&odnBg=ffffff : https://images.theconversation.com/files/5609/original/2966416878_4f16c927fe_o.jpg?ixlib=rb-1.1.0&q=15&auto=format&w=754&h=502&fit=crop&dpr=3 :

https://wpcluster.dctdigital.com/thecourier/wp-content/uploads/sites/12/2018/12/Self-harm1-e1512488389597-768x499.jpg : https://static.wixstatic.com/media/11062b_ebf791758f174574942ccbfbd5fe9f99~mv2.jpg/v1/crop/x_0,y_775,w_4160,h_3009/fill/w_940,h_680,al_c,q_85,usm_0.66_1.00_0.01/Headache%20.jpg ;

Article: https://sundayworld.co.za/news/business/gems-hauled-to-court-over-irregular-pharmacy-contract/ : https://sundayworld.co.za/wp-content/uploads/2022/04/Gavel-696x505.jpg ; https://th.bing.com/th/id/OIF.s6mqkJypvtCApFtNBijz8Q?pid=ImgDet&rs=1; https://www.groundup.org.za/media/uploads/images/photographers/Ashraf%20Hendricks/20180222%20Joburg%20High%20Court/Joburg_HighCourt-9142HR.jpg; https://ihospitalathome.com/wp-content/uploads/2021/01/medcine-480x480.jpg; https://ajt-ventures.com/wp-content/uploads/2019/01/Legal-Technology-Trends-880x670.jpg ; https://els-jbs-prod-cdn.jbs.elsevierhealth.com/cms/attachment/f900d33d-52f8-4164-aa91-b7b9eca6e0cc/fx1_lrg.jpg;

Article:

https://www.medicalnewstoday.com/articles/scientists-may-have-found-the-immunity-secret-to-living-to-100 ;

https://scopeheal.com/wp-content/uploads/2018/04/immune-300x216.jpeg ; https://image.freepik.com/free-photo/elderly-people-sneezing-coughing-into-her-sleeve-elbow-prevent-spread-covid-19_56854-3068.jpg ; https://clipground.com/images/100th-birthday-clipart-18.jpg ; https://amac.us/wp-content/uploads/2015/10/senior-couple.jpg ; https://www.newstarget.com/wp-content/uploads/sites/43/2016/02/Older-Couple-Seniors-Happy-Active-Health.jpg ;

https://www.bing.com/images/search?view=detailV2&ccid=2eqfZING&id=C8E14B524331AB093F3705F3BC2C9DB26B6E8CFC&thid=OIP.2eqfZING1alahLUGBkGuSgHaHh&mediaurl=https%3a%2f%2fstatic01.nyt.com%2fimages%2f2016%2f06%2f05%2fopinion%2fsunday%2f05valasquez-manoff%2f05valasquez-manoff-articleLarge.gif&cdnurl=https%3a%2f%2fth.bing.com%2fth%2fid%2fR.d9ea9f648346d5a95a84b5060641ae4a%3frik%3d%252fIxua7KdLLzzBQ%26pid%3dImgRaw%26r%3d0&exph=610&expw=600&q=healthy+immune+system&simid=608015950516130771&FORM=IRPRST&ck=9DB43DA64AD56BC07A986FAB7961BF22&selectedIndex=10 ; https://th.bing.com/th/id/R.45950ba90fe9bea3a4f1badc48afc383?rik=tVDZV5s9KIrfSg&riu=http%3a%2f%2fjonliefmd.com%2fwp-content%2fuploads%2f2014%2f11%2fbigstock-DNA-cell-chromosome-Illustration-showing-the-forma-32048591.jpg&ehk=U9QIvQIK%2f1D6oN%2flw72QYp%2fH4zKeWld0MJXvXD8Txv4%3d&risl=&pid=ImgRaw&r=0 ; https://th.bing.com/th/id/OIP.KThg-ttTaUf_cQolN7jnaQHaDt?pid=ImgDet&rs=1