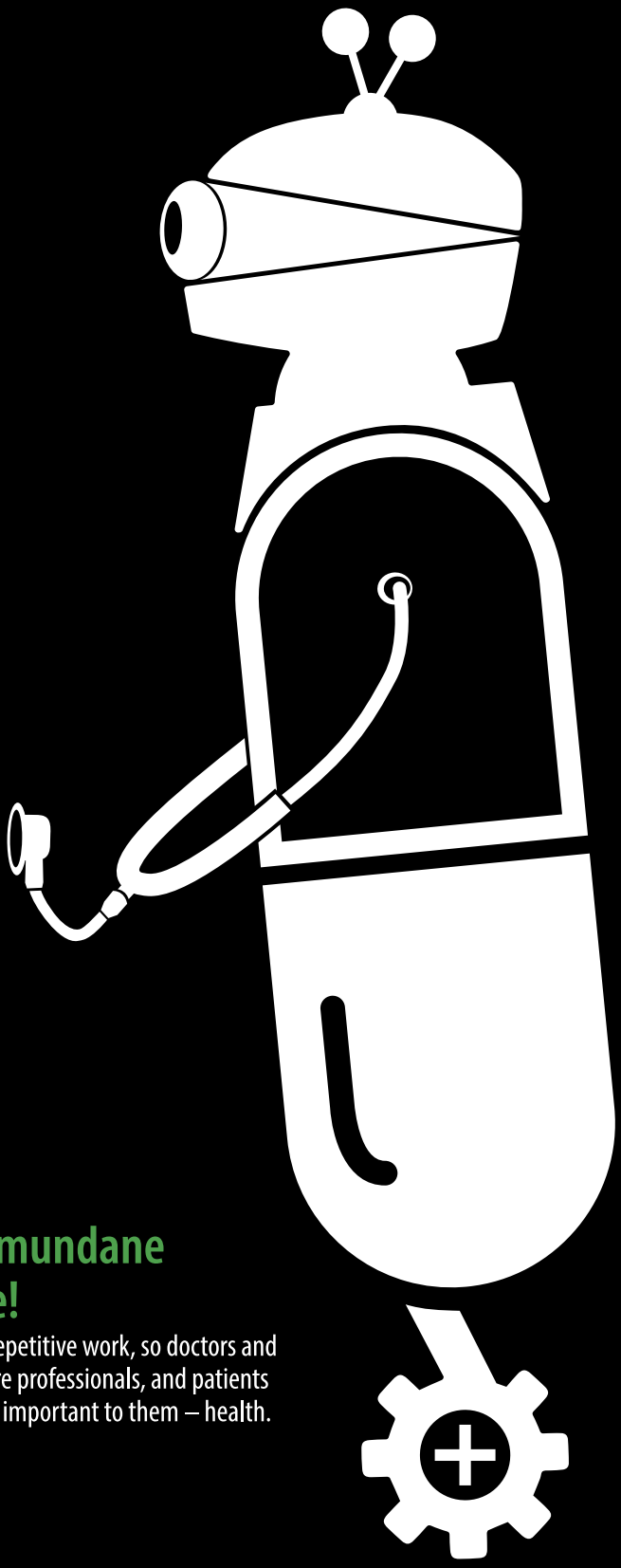
YOU CAN FOCUS ON CARE, NOT COSTS, THANKS TO AI

AI in healthcare can complement the workforce and amplify their capabilities. Human capital in healthcare needs to be diverted to care at the intersection of caregivers and patients rather than be involved in low-value, back-office operations to support front-line caregivers. AI-led automation is ushering in this great opportunity today.

Although Americans spend far more on healthcare than any other high-income country, this spend is incommensurate to the health outcomes they experience. Life expectancy is shorter than desired and chronic conditions are still widely prevalent, among other things. Analyzing this high healthcare spend reveals several underlying reasons: an ageing population, rising use of new expensive technologies in radiology, new procedures, increase in prescription drug costs (e.g., for Hepatitis C), high pharma marketing spend, and a growing number of specialties.

In addition, digital and AI-led disruption, which could bring about significant cost and process efficiencies have been relatively slow in this industry, which has also been traditionally slow to adopt new technologies owing to complexities arising out of multiple ecosystem players and intricate regulations. However, consumers are now demanding more from healthcare. As digitization sweeps across industries, consumer technologies have been growing in popularity, especially in retail and banking. These consumers are also increasingly demanding better pricing transparency, connected experience across payors, physicians, hospitals, pharmacies, and other supporting institutions, all of which play an integral role in the care continuum. And the healthcare industry is beginning to respond.



Leave the mundane stuff to me!

RPA is taking over repetitive work, so doctors and and other healthcare professionals, and patients can focus on what's important to them – health.

In 2014, the market for AI in healthcare was worth over US$600 million, and this figure is expected to rise ten times by 2021. Today, healthcare is widely believed to be one of the industries destined for AI-led transformation, which will be an antidote for the high costs, as well as an enabler for better health outcomes and experiences.

For some years now, a chatbot at Aetna named Ann has been providing round-the-clock assistance to new members in using its website, guiding them through the registration process, or helping them to recover user names and passwords. Similarly, at Credit Agricole, chatbot Marc responds to product queries in the company's health insurance space and makes relevant offers to customers after analyzing their needs. The potential of robots in superseding humans at the front office is enormous.

Deploying Robotic Process Automation (RPA) and AI in health technology can help deliver a rich and seamless experience for all participants in the care continuum. Such a model will pivot around the member, enabling her to navigate the healthcare ecosystem to derive the best possible care. In this article, we share our view on the impact of these technologies on business.

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Choosing wisely, but acting quickly

Enthusiasm over RPA and AI has caused a proliferation of solutions in the healthcare space. While the perfect solution might be elusive, the best way forward is to choose a solution that is most effective for the organization. This however, invariably leads to the bigger challenge – to secure support, technical and otherwise, for RPA and AI initiatives, especially at the grassroots level, and ensure robust governance around them. It is important to identify the processes best suited for automation, conduct pilots to demonstrate quick wins, and then trigger a virtuous cycle where success breeds success. Automating broken processes, however, can not only be inefficient but also dangerous. Processes must be rationalized, optimized, and simplified before automation.

The good news is that unlike traditional IT projects, which run for several years, an RPA/ Automation project life cycle lasts for six to ten weeks – from ideation to implementation. In our view, RPA is the right place to commence an automation journey, laying the foundation for more sophisticated AI deployment.

Doing more than just paring down costs

RPA and AI will have a far-reaching impact on healthcare, well beyond their potential to save costs or reduce labor, although these two benefits are currently paramount. By eliminating duplicate processes and automating member support processes, RPA will make it much simpler for members to avail of services of healthcare companies, even as it enables them to complete transactions faster, benefiting all stakeholders. For example, leveraging automation through a combination of RPA and AI, a healthcare company could disseminate communications on procedure authorization or claims status faster to patients and doctors. Another important benefit is improvement in quality of compliance, because with RPA, processes become fully documented, traceable, and transparent. AI can ensure accuracy of provider data, which will help healthcare companies avoid steep regulatory penalties imposed in the absence of accurate provider data.

In addition, an intelligent system can turn its vast data resources into insights and use that to propose personalized offerings to prospects, or simply offer the most relevant additional product to an existing member. Last but not the least, AI helps healthcare companies take better care of their members. In this business, it is not uncommon to encounter emotional or agitated callers. Companies can train their service staff to deal with them with empathy. There are AI software solutions, which analyze the speech of company associates during calls, and prompt them to soften their tone or slow down, whenever required.

Enabling people to accomplish purposeful goals

It is estimated that a claim processed with manual intervention costs about US$4, which when auto-adjudicated, costs about US$1 with legacy technology, and even less with automation. A single robot, which can accomplish the work of 2 to 5 claims processors, can deliver over 20X returns on labor costs alone over a 5-year term. The savings for healthcare companies, which have very large service operations with several thousand employees, is clearly enormous. Beyond this cost factor, there is an enticing opportunity to deliver a human-centered design for healthcare; by redeploying freed up staff on work of a higher order, such as member intimacy and member-care. Automating most routine tasks in service operations will make staff available to engage members in proactive, contextual, and meaningful conversations, which are also AI-enabled, and help members improve their health, or enjoy more healthy days.

An illustration might be useful here: If an AI system alerts an associate about a member who has missed renewing a prescription for diabetes medication and provides a predictive insight in to the member's health disposition based on health history and related attributes, the healthcare associate can promptly arrange a review with the member's healthcare provider.

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Challenges and concerns

Employees are anxious about losing their jobs to automation, and their employers about managing the change. These concerns can be addressed to a great extent by communicating plans for redeployment and retraining as early as possible. Here, it may be useful to cite the example of the banking industry, which is about a decade ahead of healthcare in terms of technology adoption. Although the teller function in banking was automated decades ago, the people who were serving in those roles continue in the industry, albeit in new roles.

An expanding technology landscape around robotics and intelligent operational systems (RIOS) gives rise to several challenges. The proliferation of solutions and vendors in healthcare complicates the decisions around AI adoption. Maintenance of AI solutions, as they scale from a single process to several thousands, is another important concern, followed by their governance and ROI.

Welcoming the Chief Robotics Officer

RIOS and AI in general will also precipitate new positions within companies and new business models in the market. The Chief Robotics Officer (CRO) will emerge in the next few years, especially in industries such as healthcare where automation is beginning to be embraced rapidly. The CRO will assume a comprehensive role with many responsibilities – from choosing the right technologies, and managing change and effective staff communications, to managing costs, governance, and ensuring ROI. She will eventually become what the CIO is today across businesses, and may even earn a place in the boardroom.

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About the Author

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Venky is responsible for business profitability and growth of healthcare clients for Infosys. He manages critical relationships with senior client executives and industry analysts, and anchors talent development of key Infosys personnel. He is responsible for crafting and delivering business and technology solutions to client business problems with his deep understanding of the healthcare business and technology.

Previously, he was the global delivery head for the Infosys Digital Transformation Practice focused on the retail and consumer industries, and was responsible for Practice P&L, project / program delivery, competency development, and talent management. He has spent over 21 years with Infosys and has won many excellence and Gold standard awards for outstanding achievement ranging from thought leadership to client management.

He holds a bachelor's degree in mechanical engineering and has completed an executive leadership program at the Stanford Graduate School of Business.

If you wish to share your thoughts on this article or seek more information, write to us at Insights@infosys.com