FROM DIGITALIZATION TO IMPLEMENTATION: WHAT DENMARK AND SOUTH KOREA CAN BUILD TOGETHER IN HEALTHCARE

by

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Introduction

Denmark and South Korea are very different healthcare systems. Any attempt to copy and paste digital solutions from one country to the other should therefore be approached with caution. South Korea has a population nearly ten times that of Denmark, a hospital sector in which private providers play a prominent role, and patterns of staffing, management, and working life that differ substantially from those in Danish hospitals. The balance among physicians, nurses, and other hospital employees also differ considerably. These differences matter because digital transformation takes place within institutions, not outside them.

Yet, the contrast is precisely what makes the relationship interesting. Denmark has spent decades developing shared digital infrastructure, data exchange, and interoperability across its healthcare system. South Korea combines advanced hospitals with a sophisticated hardware and software industry and a notable capacity to test technologies in operational settings. Neither model offers a complete answer to the pressures facing modern healthcare. Together, however, they suggest a productive question: What could Denmark and South Korea learn from one another about moving from digital ambitions to practical implementation?

Both countries face aging populations, rising demand for care, and growing challenges in recruiting and retaining healthcare professionals. Digital tools are frequently presented as part of the solution. Their value, however, depends less on how impressive they appear in demonstrations and pilots than on whether they make everyday care safer, more efficient, and more reliable.

Learning from Hospitals in Practice

During a recent visit to South Korea in October, I had the opportunity to visit Korea University Anam Hospital and Hallym University Sacred Heart Hospital and to speak with healthcare leaders. I was especially interested in artificial intelligence (AI)-enabled workflows, governance, workforce transformation, and the effects of technology on daily hospital operations. The visits offered an opportunity to move beyond conference presentations and see how innovation is understood by people responsible for delivering care.

One impression was the emphasis on execution. The Korean settings I encountered appeared more focused on testing technologies and translating them into practice. I also observed a strong role for medical professionals in management. These are impressions from particular visits, not a comprehensive assessment of either national system. Still, they raise an important question for Denmark: Can healthcare organizations preserve necessary oversight while reducing the time between identifying a problem and testing a workable response?

The visits coincided with the 49th International Hospital Federation (IHF) World Hospital Congress in Seoul, where AI and digital transformation were prominent themes. A joint AI-declaration by the WHO and South Korea was also released during the week. The inflow of participants from other countries, including the Nordic region, reinforced the sense that South Korea has become an important place to observe the practical development of smart hospitals. It also provided a reminder that international learning works best when visitors ask how a technology is governed, maintained, and used—not simply whether it has been installed.

The Less Spectacular Side of Innovation

I first visited South Korea around 30 years ago and have returned frequently, particularly over the past decade. Over that period, the country has become an increasingly compelling setting in which to observe hospitals experimenting with AI, data-driven systems, automation, and robotics. Much of the public discussion focuses on dramatic possibilities: algorithms

that support diagnosis or robots that might one day perform highly specialized clinical tasks.

Consider the question often asked about robotics: Will robots replace doctors and nurses? A more useful question may be whether robots can remove repetitive, physically demanding, or time-consuming tasks that keep clinical staff away from patients. If a technology reduces unnecessary walking, lifting, or routine transportation, its contribution could be substantial even if it never attracts a headline.

At Hallym University Sacred Heart Hospital, I saw examples of robots used in hospital logistics, including moving supplies through the building. Service robots can also support the movement of items from hospital shops to patients. These applications may seem modest compared with AI-assisted cancer diagnosis. But a hospital operates through countless small movements and handoffs. When repetitive tasks are reduced, staff may have more time and energy for activities requiring human judgment, communication, and compassion.

Yet seeing a robot glide down a hospital corridor does not mean nurses suddenly have more time at the bedside. The link between adopting a technology and its actual impact is, to put it mildly, complicated. That said, during my site visits I was glad to see some tangible benefits: time savings for staff, reduced physical strain, and improved service delivery. The also visits reinforced a point worth remembering: the real test isn't how many robots a hospital has deployed, but whether work and patient care actually get better.

From Digital Infrastructure to Useful Workflows

The same logic applies to other digital technologies. AI-assisted documentation may reduce administrative work, but only if the resulting records are accurate and clinicians can review them without additional complexity. Remote monitoring may help some patients remain at home, but it requires clear responsibility for responding to alerts and supporting people who cannot easily use digital tools. Systems for coordinating beds, staffing, and supplies may improve hospital operations, but their effectiveness depends on the quality of data and the decisions they enable.

Denmark has considerable experience building the institutional foundations for digital healthcare. Its shared infrastructure and attention to interoperability provide an important starting point for coordinated services. The planned establishment of Digital Health Denmark marks another stage in efforts to align digital health activities. Yet even strong infrastructure does not guarantee that new tools will fit the routines of a busy ward or improve the experience of patients and employees.

Korean smart hospitals can offer valuable opportunities to study that final step. The lesson is not that Denmark should import a particular robot or AI application. Rather, Danish hospitals could examine how Korean teams identify operational problems, involve clinicians, test solutions, adapt workflows, and decide whether an innovation is worth scaling. Equally, Korean partners may find value in Denmark's experience with cross-organizational coordination, shared standards, and public trust.

International comparison should therefore focus on mechanisms rather than products. What problem was the technology intended to solve? Who was responsible for implementation? What changed in the daily work of clinicians and support staff? Which outcomes were measured, and what happened when an initial solution failed? These questions make it possible to distinguish a promising demonstration from a sustainable improvement.

A Practical Agenda for Danish–Korean Cooperation

A useful partnership could begin with a small number of concrete hospital challenges shared by both countries. Logistics is one candidate: the movement of supplies, equipment, samples, and everyday items. Documentation is another. A third is the coordination of patient pathways between hospital care and services delivered at home. These areas may offer opportunities to improve working conditions and patient experiences without assuming that the most technologically advanced intervention is always the best one.

Joint pilot projects should be designed to produce comparable learning, not identical implementations.

A solution that works in a large Korean hospital may need substantial adaptation for a Danish regional hospital. Teams could agree on common questions and measures—staff time, patient safety, usability, costs, and effects on workload—while allowing local processes to differ. Clinicians, support staff, patients, managers, and technical specialists should all have a voice in defining success.

Governance must be built into these experiments from the outset. AI systems require attention to evidence, accountability, privacy, and potential bias. Robotics raises questions about safety, integration with existing facilities, maintenance, and responsibilities when something goes wrong. Strong governance is not the opposite of innovation; it is what allows useful innovations to earn confidence and endure beyond a pilot phase.

At the same time, governance should not become an excuse for endless discussion. The Danish challenge may be to make decisions and test ideas more efficiently without weakening safeguards. The Korean challenge may be to ensure that rapid deployment is accompanied by rigorous evaluation and sufficient attention to workforce needs. Framed this way, the two countries bring complementary strengths to a common problem.

Conclusion: Learning to Implement Together

The future of healthcare will not be determined by technology alone. It will depend on whether hospitals can translate digital capabilities into better work processes, more sustainable staffing, and care that remains centered on patients. The most useful innovations may be the least spectacular: fewer unnecessary movements, less duplication, clearer information, and more time for the human side of medicine.

Denmark and South Korea should not seek to become copies of one another. Their institutions, resources, and healthcare cultures are too different for that. But those differences can become an advantage if cooperation is organized around real problems and honest evaluation. Denmark can contribute experience in trusted digital foundations and coordination across the health system. South Korea can offer practical insight into testing advanced technologies in demanding hospital environments.

The opportunity is to connect these strengths: to move beyond digitalization as a policy ambition and toward implementation as a shared discipline. That would be a meaningful contribution to the healthcare systems both countries will need in the decades ahead.

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