

# TPG International Health Academy Denmark Executive Trade/Study Mission September 17-22, 2016

## Executive Summary

In September 2016, TPG International Health Academy (TPG-IHA) and its delegation of 20 participants visited Copenhagen, Denmark. As the Academy has seen on a many of its missions, many of the challenges confronting healthcare systems are similar and yet *each* country also has some unique responses and special issues. In Denmark, the delegates were afforded an opportunity to interact with a broad cross-section of the actors in the Danish system as well as visit the corporate headquarters of Novo Nordisk. Healthcare DENMARK was instrumental in securing many of our site visits and speakers, which provided us unique access to a number of key thought leaders in the Danish system. The two most significant takeaways from the mission were:

- The three most significant problems in Denmark are obesity, tobacco use, and excess alcohol consumption; the same as most developed countries.
- Denmark has developed a patient-centered but efficiency-driven system that covers all of its citizens, where care is coordinated by their primary care physician.

## Overview

The Danish health care system is a single payer system organized through the central government but regionally administered. Care is generally free at the point of service and, with the exception of emergency care, is coordinated by the individual's primary care physician. The primary care physicians are independent contractors who receive both a monthly capitated payment and fee for service reimbursement. The latter represents the bulk of their reimbursement. They are gatekeepers in both a figurative and literal sense. Because health care is considered part of the social contract between citizens and the government, the need for prudent spending is inculcated into both the PCP's practice and the expectation of the public.

The Danes have a highly-developed and portable electronic medical record. The medical record "belongs" to the patient and all tests and screens must be posted to the record within 48 hours. (This can lead to some friction with the PCP if the PCP hasn't reviewed the record before the patient contacts them.) This has allowed the Danish Health Ministry to capture substantial data, which in turn allows them to pursue population health initiatives and other quality improvement activities. There is currently a conflict between the PCP's and the Ministry concerning the use of the data. The PCP's have resisted individual reporting and oversight. Ironically the enabling legislation did not include the PCP's, so at

present, quality and other data can only be used at regional and institutional levels but not at the PCP level. Some in the country believe legislation to “fix” the problem will be passed in Parliament, but the PCP’s are resistant to the increased oversight that will accompany the change.

The Danes emphasis on quality and efficiency has led to a reduction in hospital beds per thousand and an increase in specialization by hospitals. The Danes recognize that the only way they can continue to “afford” the quality and relatively low cost to individual citizens is through continuous improvement in efficiency.

## Denmark Overview

### Key Statistics

|                                   |             |                   |
|-----------------------------------|-------------|-------------------|
| Population                        | 5.7 Million |                   |
| Health Care as a % of GDP         | 11.0%       | (OECD Avg. 9.4%)  |
| Public expenditure on Health Care | 85.8%       | (OECD Avg. 72.3%) |
| Hospital Beds per 1000            | 3.1         | (OECD Avg. 4.8)   |
| Doctors per 1000 of population    | 3.5         | (OECD Avg. 3.2)   |
| Nurses per 1000 of population     | 15.4        | (OECD Avg. 8.9)   |

Land mass is approximately the size of Massachusetts, Connecticut and Rhode Island combined.

Copenhagen with 2.0 million and Arhus with 330 thousand represent over 1/3 of the population. The remainder is spread in smaller cities and ex-urban areas.

## Role of Information Technology

As noted above, Denmark was an early and ubiquitous adopter of Electronic Medical Record Systems. Further they have developed a robust data exchange that is essentially agnostic to the type of system connected to it. This is critical to the enhancements they have achieved and are targeting for the future. The consistency of data and the ability to use it for longitudinal and disease specific studies had and is expected to continue to drive process and outcome improvements

IT is also a critical component of the Dane’s drive for productivity improvement in the health sector. The new and remodeled/repurposed hospitals do, and will, rely on significant IT related process control to enhance productivity both by

eliminating unnecessary redundancy and through improved utilization of equipment, supplies, and testing.

Technology also plays a role in the Long-Term-Care sector. As an example, sensors have been implemented to monitor and measure patient activity, as well as track their physical location to improve safety and patient outcomes.

## Role of Central Planning and Regional Control

The Ministry of Health is responsible for overall health policy and planning. The execution of the strategy is the responsibility of the nine regions. While required to provide for the health of its constituents, the regions have a substantial degree of autonomy in execution. The regions do not have taxing authority but are provided “block grants” from the central government and some funds from their constituent municipalities. The grants are negotiated annually. The ministry has set productivity targets that must be met if the country is to continue to provide the same level of service to its citizens. The number of hospital beds has been reduced from nearly 16,000 to approximately 13,500 and will continue to shrink as the new strategic plan is executed. The new plan anticipates the creation of “super hospitals” that focus on selected specialties that will become, in effect, regional centers of excellence.

## Pharmacy

As in all countries, the cost of pharmaceuticals presents a growing challenge to the Danish Healthcare System. While not having an official economic efficiency regulator (like NICE in Britain), the regions, with assistance from the ministry, negotiate with pharmaceutical suppliers. Physicians can prescribe any licensed medicine, but the commitment to maintaining the economic viability of the system seems to mitigate the use of unnecessary and/or high cost medicines. The Danish pharmaceutical spend seems to be in line with most Western European countries, but the statistics are a bit clouded by the allocation of cost between the hospital sector and the primary care sector. Danes are required to pay nominal co-pays for their drugs, up to a relatively low out-of-pocket maximum.

There are several large pharma companies in Denmark—most notably Novo Nordisk. The delegation spent a half-day at Novo Nordisk and learned of their commitment to improving outcomes in both their home market and throughout the world. One of their initiatives is the Steno Diabetes Center. Although still receiving significant support from Novo, the Clinic is now operated as a part of the Danish health system. Among its goals are an overall improvement of outcomes and techniques for diabetes care. The intent is to then spread the “best practice” throughout the country.

## Mission Highlights

The mission was afforded a warm welcome and great cooperation from Healthcare DENMARK and the US Embassy. Through the auspices of Healthcare DENMARK the delegates were provided insight into the overall health system as well as the opportunity to meet with leaders of several institutions. Notably the delegation met with the director of KORA. KORA is an independent institute that studies productivity and quality in various governmental services, including health care, but also others like social services and education. KORA assists the regions and central government in determining the efficacy of their programs and results versus targets. KORA also provides analytical assistance to the purchasing decisions for pharma products and medical devices.

The delegation also visited the Plejecenter Shovhuset elder care facility (long-term care). In Denmark, long-term care in governmental and private institutions is provided to all qualifying citizens by the government. Individuals are required to pay for the services but they are generally priced to be affordable for anyone who receives the universal old age pension (granted to all Danes at 65). Many of the processes at the facility were state-of-the-art in assisted living care. Among the unique aspects of the Danish long-term care system is that couples are allowed to move into units together, even if only one of the individuals is qualified to be in the institution. In addition, if the qualified spouse dies, the survivor may continue to live in the facility as long as he or she desires. Danish law requires that all placements in long-term care facilities be voluntary (approved by the patient's PCP) but at any time a resident is free to leave. As a result, the facilities have embraced technology to monitor movement and help maintain the safety of their residents.

## Summary

The Danish system has a number of admirable attributes: relatively cost effective, supported by the population, provides universal coverage, incorporates long-term care and support, is focused on quality and cost improvement. It unfortunately suffers from the same intractable problems facing most developed countries: excessive smoking, overuse of alcohol, obesity (with its concomitant increase in diabetes and its excessive cost and health outcome burden), aging population, and disproportionately high inflation in the health care sector. The Danes also are plagued with the same socio-economic impact on longevity--the lower an individual's social economic status, the shorter their life expectancy. This is particularly interesting in light of universal access to essentially free care.

With its emphasis on primary care and its commitment to quality and cost improvement, the Danish system appears to be well positioned to grapple with the challenges it will face in the future.