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International Comparison of Specialist Care Organization: Innovations in Five Countries

England • Germany • Italy • The Netherlands • The United States
Innovating Hospital Services at the University
of North Carolina Medical Center

Lucie Michel, Zeynep Or (IRDES)

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Études de cas

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International Comparison of Specialist Care Organization: Innovations in Five Countries

The United States - Innovating Hospital Services at the University of North Carolina Medical Center

IRDES - October 2021

About this study

Under pressure of increasing demand for healthcare from an ageing population with multiple chronic conditions, France, as other countries, seeks to advance care coordination and integration across primary, hospital and long-term care sectors. Specialists play an essential role in treating patients with chronic conditions, but little attention is given to their organization out of hospital, and their role in enhancing care coordination and patient-centered care provision. France Stratégie (French High Council for the Future of Health Insurance, *Haut Conseil pour l'avenir de l'Assurance maladie*, HCAAM) asked the Institute for Research and Information in Health Economics (IRDES) to provide an international perspective on the subject.

In collaboration with researchers and experts from five countries (England, Germany, Italy, the Netherlands, and the United States), we have identified several specialist care delivery models. In order to understand the effective organization of care around specific health conditions, we carried out case studies in these countries between June 2018 and March 2019. These were not intended to provide a global description of outpatient care in each country, but rather to examine the care organization around patients with specific conditions, examining the division of roles and tasks between medical specialists and other professionals involved, the innovative features of the care model, and its funding.

The two case studies in this report describe the innovative services provided by the University of North Carolina Medical Center in the US southern Atlantic state of North Carolina. The first example concerns the investment in teamwork in genital and urology clinic, for improving care for cancer patients, while the second focuses on an initiative that aimed to improve care coordination of patients with chronic renal insufficiency by integrating treatments provided in the hospital and private dialysis

centres. They are based on visits organized in North Carolina in February 2019. During the visit, we interviewed health professionals involved in these initiatives, as well as the faculty staff in the Office of Interprofessional Education and Practice, who are working collaboratively to create change in medical practice.

THE AMERICAN HEALTHCARE *in a nutshell*

The United States does not have a uniform healthcare system or universal healthcare coverage; in 2010 the ACA law (Affordable Care Act) made it obligatory to have health insurance for 90% of the population. However, insurance coverage is very fragmented, with many private and public sources, and significant differences in population covered, depending on the State (Oberlander, 2020). There are two major public schemes: Medicare, a federal programme that covers every adult aged 65 and over and certain disabled people (16% of the insured persons), and the Medicaid and Children's Health Insurance Program which targets certain individuals with low income or categories such as pregnant women (20% of the insured). They are both administered by CMS (Centers for Medicare and Medicaid Services). Medicaid is funded jointly by the States and the federal government and managed by the States, respecting federal requirements. These two programs together pay for 40% of US healthcare expenditure. The private insurance schemes are regulated by each State and they sometimes use limited healthcare supplier networks, with restricted or no cover if the individual is treated outside the network. Medicare covers post-acute care (up to 100 days), but not long-term care, while Medicaid offers a more extensive long-term care coverage (Commonwealth Fund, 2019).

Health care in the US is mainly structured around hospital systems and specialty services with less organised primary care. Primary care doctors represent only a third of all doctors. Most of them practise in small independent practices or group practices comprising on average five doctors, but the size of the groups is getting larger. Most of the doctors are paid on the basis of a mixture of payment modes that include negotiated fees (private insurance), capitation (private insurance), and fees that are set administratively (public insurance). Specialists can work in private practices and in public or private hospitals. Certain insurance schemes require a referral from a primary care doctor to consult a specialist and restrict the choice of specialist by the patient, while other schemes enable the patient to have direct access to a specialist. This access may be particularly difficult for those who benefit from Medicaid and for uninsured persons, as some specialists and a few primary care physicians refuse to accept Medicaid payment.

Hospitals are remunerated by multiple insurance companies with different remuneration schemes, usually payments per service or per day (per diem) but also payments per case (diagnosis-related groups, DRG) and bundled payments (combining physician and hospital) that focus on procedures (knee replacement, for example). In the case of bundles, a hospital and the physicians may be financially responsible for any readmissions and services provided by other providers after the patient's discharge. Some doctors working in hospitals are salaried, but most are paid primarily on a fee-for service basis separately from the hospital.

.../...

Since the ACA law, all insurers, whether public or private, are striving to pay according to the value of care and encourage care models that are more centred around patients. The CMS actively supports the development of local programmes aiming to integrate treatments and healthcare services with the social and extended medical services. The two most popular programmes include Accountable Care Organizations (ACO), which designate the healthcare supplier networks that are contractually responsible for providing treatment to a specific population and meet quality objectives; and, bundled payments, which involve a single payment made for all the services provided by several service suppliers, for one treatment episode (CMS, 2019).

1. MULTIDISCIPLINARY TREATMENT IN ONCOLOGY – NORTH CAROLINA

Genital and urology clinic

1.1. Background

- ▶ Cancer is one of the most common diseases in the United States: more than 1.6 million are diagnosed with cancer each year. A high proportion of them are aged 65 or over and are Medicare beneficiaries.
- ▶ The cost of treating the population of cancer patients represents around 5% of all healthcare in the United States—and this cost is constantly increasing (Deloitte, 2016).
- ▶ The data show that between 2004 and 2014, the proportion of the annual cost of medicines per patient (chemotherapy and anti-cancer medication) rose from 15% to 20%, while hospitalisation costs dropped from 21% to 18% (Fitch et al., 2016).
- ▶ The CMS (Centers for Medicare and Medicaid Services), in partnership with the oncologists, other healthcare service providers, and private insurance schemes, supports local initiatives that aim to improve the healthcare, while reducing costs, for this medically complex population.
- ▶ This case describes services provided by the University of North Carolina Medical Center (UNC Health) a university-based academic health center in the US southern Atlantic state of North Carolina comprising 900 beds divided into N.C. Memorial Hospital, N.C. Children's Hospital, N.C. Neurosciences Hospital and N.C. Women's Hospital. The hospital also includes the Lineberger Comprehensive Cancer Center.
- ▶ The example below concerns teamwork of the genital and urology clinic, which treats cancers of the bladder, prostate, urinary tracts, and genitals.

1.2. History of the development of multidisciplinary treatment

The University of North Carolina (UNC) Lineberger Comprehensive Cancer Center is a centre for cancer research and treatment located at Chapel Hill within the University. It is the only public-hospital cancer centre and one of the 45 comprehensive cancer centres recognised/accredited by the US National Cancer Institute. Hence the centre receives earmarked funding from the latter. The centre is recognised as one of the finest in the United States (News & World Report's, Best Hospitals rankings for 2018–19) and over recent years it has developed interdisciplinary treatment and research programmes in several fields such as immunology, molecular therapies, virology, breast cancer, genetics, and cancer prevention.

The multidisciplinary cancer treatment programme of the Genital and Urology (GU) clinic was established at the end of 2000s by a well-recognised surgeon in the department. According to the surgeons we met, in the United States the treatment of urological cancers is too often based on a surgical tradition, while they view chemotherapy as the traditional treatment in Europe. Hence, a large number of patients suffering from urological cancer are given no real choice but surgery, without any other option. UNC has developed a new approach aimed to improve collaboration between surgeons, oncologist-radiologist, and other health care providers, especially pathologists, to enable the best decisions to be taken for the patient, based on multidisciplinary opinions. This multidisciplinary approach allows for a more collegial determination of what is best for the patient and to be transparent about treatment options.

1.3. A patient-centred organisation of cancer care



If we imagine ourselves as the patient, we want the best for them, so we have to think everything we do from the point of view of somebody who doesn't know anything about cancer care. »

Oncology surgeon, UNC, Chapel Hill, The United States

The GU clinic comprises six urologists, six medical oncologists, three radiologists, two nurse practitioners, and four nurse navigators (two in oncology, two in surgery). The medical team is also supported by medical and physician assistants (see Box 1).

The hospital consultations are organised in a coordinated manner (twice a week): on the day of a visit, the patient consults the surgeon, the oncologist, and the radiologist (depending on the type of cancer). It is the doctors and nurses who visit the patient, who remains in the same consultation room. Each doctor also works with a medical assistant and a physician assistant (see Box 1). The four nurse navigators follow up patients from the day they are diagnosed to their recovery or end of life.

Thursday afternoons are devoted to a multidisciplinary meeting that includes all the doctors, the pathologist, nurse practitioners, and nurse navigators. These consultation meetings enable the staff to agree on decisions concerning each patient. The surgeons acknowledge that the advice given by the pathologists is valuable and that it can help to obtain

Box 1

- **Medical Assistants** attend a two-year post-secondary school training course or obtain certification directly through a hospital-based training course, and are often responsible for simple administrative and medical tasks. They work in close collaboration with the duty nurse and, in certain cases, the medical assistants can carry out clinical nursing tasks. They can consult the patients' medical history and vital signs, administer medicines and injections (such as vaccinations). They combine these clinical tasks with more administrative duties such as updating medical files and making appointments.
- **Physician Assistants** are hospital or office-based clinical practitioners who have a medical practice licence. They receive clinical training at a master's level and can make a limited number of diagnoses, treat and dress wounds, prescribe certain medicines, manage medical emergencies, and carry out medical examinations. However, even though they specialise in many medical fields, they always work under the supervision of a referring doctor (specialist).

a more precise diagnosis, and improve decisions on the types of treatment. The reports of the decisions are shared on each occasion with the general practitioners via the shared medical file.

1.4. The nurse navigators: the "pivots" of integrated treatment



The way we work is truly collaborative, and the nurse navigator has a key role to keep it patient centered. »

Surgeon, Head of the Department of Urological Surgery

The UNC Cancer Hospital started its nurse navigator programme in 2008, in order to provide individualised assistance to cancer patients, without extra charges for their services. It is seen as an "added value" to the care by the hospital and by the Lineberger Comprehensive Cancer Center, which co-funds the program.

The nurse navigators at UNC help the patients to make their way around the health-care system, both in and out of the hospital, before, during, and after the cancer treatment. They help the patients to 'navigate' around the system by:

- Providing a single contact point for the patients and health professionals in order to facilitate the organisation of treatments.
- Accompanying the patients during treatment from their first consultations with the physicians and beyond.
- Answering questions about chemotherapy, etc. in hospital and at home (via telephone mostly).
- Coordinating diagnoses, procedures, and consultations with specialists.
- Assessing the patient's physical, emotional, psycho-social, and financial needs.
- Referring and helping the patients to benefit from community resources.
- Providing patient education.

Their role is considered as fundamental in decreasing rehospitalisations and emergency admissions. They can deal with various medical situations over the phone, and help patients to manage the side effects of treatments (chemotherapy and radiotherapy).

The nurse navigators are full members of the oncology team and usually work with one or two physicians or surgeons. They follow and help the patients at each step of the care pathway, guiding them through surgery, chemotherapy, palliative care or helping them build a survivorship plan. The nurse navigators in this configuration have a mixed role between working as a case manager and a clinical-oriented expert in the field of oncology. While providing medical advice mainly to cope with treatment side effects, they are also focused on the socio-economic problems and daily life of patients under treatment. For example, the Lineberger Centre has a library with educational facilities, discussion rooms, a spa where patients can have a massage after chemotherapy sessions, and advice is given on the wearing of wigs. One of the nurse navigators works full time in this 'resources centre' to help the patients and their families to live with cancer. She provides psychological and social support and therapeutic education to the patients and their families.

There is no formal training that leads to a qualification to become a nurse navigator. However, the nurse must have a specific expertise in oncology, via training and certification. The nurse navigators are also recruited according to their experience and can be «senior»nurses. In other hospital departments, the nurse navigators are sometimes social workers (see Box 2) or physiotherapists. The nurse navigator is always responsible for running therapeutic education sessions, but depending on the situations s/he may also give patients legal advice (to help them obtain social and financial assistance).

The programme has been adopted permanently, and the patients, healthcare professionals, and hospital management appear to be happy with it. However, over the last ten years the nurse navigators have found it difficult to specifically define their role, which is often at the intersection of several professions and which is highly dependent on the context of the team in which they work. The turnover rate appears to be high because some of the nurse navigators find it difficult to set the boundaries of their work. When their «scope of practice» is not well defined, they end up 'working on all fronts' resulting in "burnout" or dissatisfaction.



The navigation role is just an application of some of my competencies as a nurse but towards new needs, I am not trained to do navigation, I use my long-time experience in oncology to help my patient navigate the system. »

Nurse Navigator, Oncology Department
University Hospital of North Carolina, The United States

Box 2. Medical Social workers

Health problems result in emotional, financial, and social needs. Social workers in healthcare are licenced professionals who are adept at helping people meet these types of needs. They may serve as case managers, patient navigators, and therapists in medical settings or at home. They are trained to give counselling, support and information, and make referrals to community-based resources. They often navigate patients between levels of care or separate institutions. Services include advising family caregivers, interventions designed to promote health, prevent disease, and address barriers to access to healthcare (Saxe Zerden et al., 2019).

To become a social worker a master's degree is required, although some positions may allow baccalaureate social workers who will have a more limited range of duties, for example, discharge planning. To work in medical settings social workers need to have a licence from a state board of social work. To earn a clinical level of licensing which is the highest level of licensing, candidates must pass an exam and work two to three years under the supervision of a clinician, who will consult on subjects such as clinical practices and ethics before making a recommendation for licensure (<https://socialworklicensure.org/careers/>).

In 2018, there were about 175,000 medical social workers in the US and this is a growing field. The aging population is predicted to expand the need for these social workers.

1.5. A model sustained by targeted quality payments



The model here is a good model for quality of patient care, but it is not a sustainable economic model, if you look at the time spent on conference on Thursday afternoons you lose surgery time for instance, but you gain so much in quality. »

Surgeon, GU clinic, UNC

The public status of the UNC Lineberger centre means that all of the staff, including the surgeons, are salaried, which is rare in the USA. The nurse navigation programme is directly funded by the cancer centre and the hospital.

The hospital is part of an Accountable Care Organization (ACO) and signed ACO contracts with two insurance companies in 2017. According to the management, various audits and studies have demonstrated the added value of the navigation programme: the patients are better accompanied and informed, and they can access to public support for their treatments, resulting in less use of the emergency department. Nevertheless, for patients covered by the diagnosis-related (DRG)-based payment scheme¹, primarily Medicare or elderly patients, the integrated model implemented in the GU department does not generate sufficient financial resources for the hospital. The integrated approach is an organisational innovation that aims to reduce the volume of hospital interventions. Multidisciplinary teamwork reduces the number of surgeries, as well as consultations, and readmissions to the hospital, in a context in which the surgeons are under pressure to perform a certain number

¹ In the US hospitals receive different type of payments from different insurers.

of surgical interventions in order to generate funds for the hospital. In this context, the ACO contracts were considered as a good solution, but the hospital realised that the reduction in readmissions was not enough to balance the contracts. The fact that they care for a large share of under-privileged population groups (low-income, homeless, etc.) makes it difficult to avoid certain readmissions. At the end of the first year, they were in deficit with regard to these contracts.

The hospital management is also considering a new contract called 'bundled' payment in cancer care that has been proposed by the CMS for the beneficiaries of the Medicare programme (for people aged 65 years and older and disabled younger people). The CMS want to introduce a mandatory oncology bundle model in the United States to improve care transitions and to manage post-acute care effectively by bundling payments for surgeons, hospitals, and radiologists. However, there is no consensus on a pertinent model, and overlaps between bundled payment and ACO contracts create confusion (NAACOS, 2017). Moreover, this kind of payment is difficult to implement in a treatment programme that is as clinically dynamic and complex as cancer. A shift towards 'bundled' payments might oblige the nurse navigators to quantify their activity. According to them that would automatically increase monitoring, for greater transparency, and would increase administrative work.

Furthermore, oncology is increasingly shifting towards ambulatory treatments (for example, oral chemotherapies or immunotherapies) complemented by a telephone follow-up or via telemedicine tools. This type of new approaches are not compatible with a system mainly based on fee-for-service since the reduction in the number of consultations would result in less income for the hospital.

Box 3. The Oncology Care Model (OCM)

The OCM is a bundled payment system developed by the Center for Medicare and Medicaid Innovation (CMMI—the part of CMS that implements new payment and treatment schemes). This model aims to improve the treatment of patients undergoing chemotherapy by defining six-month treatment episodes. Hence, this programme combines 1) fees-for-services for regular treatments, 2) monthly payments for additional services with an emphasis on chemotherapy, and 3) performance-related payments based on quality criteria and on benchmarking.

Under this arrangement the doctors and hospitals may be paid 160 dollars per patient each month for six months starting at the beginning of the chemotherapy. In order to receive these payments, the treatment programme must comply with the following guidelines:

- Providing access 24/24 hours, 7 days per week to a healthcare service provider who has access to the practice's medical files.
- Developing and maintaining a comprehensive care management plan, as described by the Institute of Medicine.
- Coordinating the treatments by using nurse navigators.
- The obligation to use a certified shared medical file.
- Using clinical treatments validated by the directives.
- Reporting improvements in care and clinical results, and using the data to continuously improve quality.

Source: CMS, 2019.

2. AN INTEGRATED CARE MODEL FOR CHRONIC RENAL INSUFFICIENCY IN NORTH CAROLINA

2.1. Background

- ▶ In the United States, the treatment of advanced renal insufficiency benefits from exceptional measures. In 1972, the US Congress voted for an amendment of the social security legislation "to assure that any individual who suffers from chronic renal disease will have available to him the necessary life-saving care and treatment for such disease and will not be denied such treatment because of his inability to pay for it" (Institute of Medicine, 1991). Patients suffering from chronic renal insufficiency, known as ESRD (End-Stage Renal Disease) are covered by Medicare, regardless of their age or income.
- ▶ In 2015, 703,243 Americans received a treatment for ESRD, compared with 56,434 in 1980 (United States Renal Data System).
- ▶ About 80% of the cost of ESRD treatments is reimbursed by Medicare.
- ▶ In the 1980s, most of dialysis centres were run by nephrologists, but gradually many have been sold to large chains that benefit from tax negotiated margins, and which are under pressure from their shareholders to reduce their operational costs (Shinkman, 2016).
- ▶ Although nephrologists can play a clinical and supervisory role, most of the dialysis centres are now run like companies and only recruit paramedical staff.
- ▶ Therefore, care coordination between dialysis centres and hospitals is weak, while the number of ESRD patients with comorbidities has been increasing over time (Mu et al., 2018).
- ▶ This case study focused on the initiative of a hospital team that aimed to improve the care coordination of their ESRD patients by integrating treatments provided in private dialysis centres and the public hospital.

2.2. The history of the development of integrated treatment

The initial idea of modifying the care model to decompartmentalise the treatment of patients suffering from chronic renal insufficiency (ESDR patients) came from the nephrologists working in the University of North Carolina hospital. They observed that some chronic patients, who often suffer from multiple health problems (especially diabetes, etc.), would be discharged from hospital only to come back a couple of weeks later with complications which could have been prevented with a better follow-up in primary care. According to the physicians, many of these patients were overweight, had low income, and low education levels. They thought that better information and continuous follow-up in dialysis centres would help to prevent many problems (see Box 4). The disconnection between the dialysis centres and the hospital was leading to a large number of avoidable hospitalisations and complications.

In 2012, the haematology team in the University of North Carolina Hospital decided to develop an integrated care network at the local level using ad hoc fundings (research grants).

They had the following objectives:

- Improving the quality and continuity of treatments for the patients, as well as the coordination between the hospital professionals and those in the dialysis centres.
- Reducing repeat hospitalisations and consultations in emergency departments.
- Improving patient outcomes with better follow-up.

Box 4. The organisation of the dialysis centres in the Chapel Hill area

The integrated care program joins the UNC hospital with four dialysis centres. These private dialysis centres, which are part of a chain, are overseen locally by an operations director who is a former social assistant. She does not deal with the medical aspects of their operation, but rather looks after the organisational and administrative issues.

These four centres are organized similarly. For example, in one of the centres based in Carrboro (a town adjacent to Chapel Hill), the team comprises just under 10 full-time equivalent (FTE) employees and is responsible for 40 patients every day. Three or four nurses manage the dialysis process and are assisted by five technicians who are dialysis specialists who are trained to install the patient, carry out the dialysis, and clean the machines; lastly, a social assistant trained in clinical psychology techniques and a dietician are present for 20% of their time in the centre. In general, there is one nurse for every 10 to 15 patients and one technician for around 4 to 8 patients.

2.3. The nurse practitioner connecting the hospital and the dialysis centres

In a standard approach to treatment, nurses and technicians in the ambulatory dialysis centres manage day-to-day administration of dialyses, a dietician offers nutritional advice to patients, and a social worker provides support with mental and behavioural troubles as well arranging administrative, social, and financial support. The nephrologists affiliated

with the UNC hospital are responsible for the medical care and treatment of complications and infections, as their primary care role is very limited.

The integrated care model developed by the UNC hospital enables close collaboration between all the actors involved in ESRD care in hospital and in the four dialysis centres. The team has a nurse practitioner who gives support to the inpatient team but also monitor patients after their discharge in the dialysis centres. She works as a hospital employee but is partly remunerated by these dialysis centres.



We had the idea of a local model of integrated care and for that we tried to model the intervention of the nurse practitioner on the transition from hospital to dialysis center and the way around. She is the bridge, the keystone. »

Nephrologist
University Hospital of North Carolina - The United States

The nurse practitioner of the team (see Box 5) divides her working hours between the hospital and four local dialysis centres that handle most of the patients of the hospital. The ESRD team has first targeted the high-risk patients who had frequent re-hospitalisations and who were in complex situations from a medical and/or social point of view, with the objective of understanding the causes and preventing repeated hospitalisations. The nurse practitioner follows the targeted patients, after discharge, in the dialysis centres. She is responsible for the clinical monitoring of the patients as well as the coordination of treatments in different places. She organises the appointments for outpatient treatments at the hospital, and manages transport issues with the help of the coordinator. But her role is also that of a primary care professional: she examines the patients when they are in the dialysis centre, and can treat daily affections, she can write a referral for a specialist or a generalist, make prescriptions, and drug reconciliation. The nurse practitioner is assisted by a care coordinator who is an administrative agent and deals with more logistical issues linked to the treatments: managing appointments, calling taxis, reserving a hotel room if necessary, as well as dealing with administrative files.

A social worker (see Box 2), trained in clinical psychology, works in the dialysis center and looks after patients during short therapy sessions; she is supervised by a psychiatrist, whom the patients may also consult if necessary. The most common issues for the team are the prevention and treatment of addictions, sleep problems, non-compliance with treatment, and depression. Together, they have developed some risk prediction and prevention models. Her role is considered to be essential in reducing hospitalisations because she helps, in particular, non-compliant patients to pursue their treatment. According to the team members, non-compliance is one of the most recurrent problems in the dialysis centres and a large number of patients do not attend all their scheduled dialysis sessions.

The dialysis centre team, including the clinical manager (a senior nurse), the dialysis centre nurses, the dietician, the social workers, and the nurse practitioner, meets once a week to discuss these complex or difficult cases, as well as subjects such as the best way of reducing the problems linked to intravenous administration and medicine-related illness,

Box 5. The nurse practitioner as the pivot for integration

« I am the bridge between both institutions »

Nurse practitioner specialist in hepatology

This nurse practitioner, who specialises in hepatology and has an advanced degree in nursing (master's), plays an important role in assuring care continuity and basic primary care in dialysis centres. Her broader competencies and certifications allow her to prescribe and review prescriptions. She is therefore capable of handling most of the primary care needs of patients who often do not have a general practitioner. Her salary is paid by the hospital and the dialysis centres, and she shares her time between the two institutions. Her access to the hospital's information system and that of the centres (which are not usually linked) facilitate information exchange and hence better care coordination. Indeed, the integrated treatment project was intended to make the information systems interoperable, but this was not technically possible.

She also plays the role of a 'navigator' helping patients to find their way around the healthcare system and organising their treatments, since depending on the cases, patients may need to see specialists in other hospitals. We note that, in this case, the role of navigator is assumed by a more qualified nurse than in the case of oncology, in which the nurse navigators are certified but are not licensed nurse practitioners.

The nurse in the dialysis centers works closely both with the nephrologists and with the support staff. This 'pivotal' position is redefined over time and the nurse practitioner we met told us it had taken her more than two years to 'find her feet', working in four dialysis centres.

anaemia, and diabetes. These meetings do not include the physicians. The nurse practitioner is in charge of gathering all the medical information and communicates directly with the hospital nephrologist who visits once a week the dialysis centre. It is therefore the nurse practitioner who creates the link —the "bridge"— between the institutions and between different physicians.

2.4. Sustainable funding is an issue

The hospital funding of a nurse practitioner working in private dialysis centres was made possible by the introduction of a "global" budget (by the CMS) aimed at improving healthcare integration. The hospital ESRD team also obtained a grant for developing a new integrated care model.

The dialysis centres which are funded by a mixture of capitation and dialysis bundles, may be of some interest to other systems. Traditionally, these centres receive fixed payments: \$250 (205€) per patient/consultation, which covers all the staff costs and overheads. Specialists are paid in a capitation system, in this case \$300 (246€) per month/patient, to follow patients. But, since 2015, Medicare has been increasingly promoting the implementation of value-based contracts by imposing patient outcomes and quality indicators (including the percentage of patients who had the right intra-venal treatment, reduced readmissions to the hospital, etc.). The centres are then have "bonuses" for meeting goals or are penalized when not. Hence, the incentives are relatively clear for the dialysis centres, and the efficiency margins ("shared savings") can be significant. The hospital's investment in this quality approach is mainly ensured by external funding but this is not necessarily permanent as the CMS attempts to reduce overall costs. At the time of our visit, the reduction in the readmission rates did not meet the target. This may be partly explained by the fact that the hospital has a

high share of socially disadvantaged population (Medicaid eligible), which makes prevention more difficult when the patients cannot follow the recommendations or do not have access to necessary primary care or social services.



We train our students around several domains such as role and responsibilities, so they learn what are their shared accountabilities, but also values and ethics within their own scope of practice and very important: communication skills, 70% of medical errors in the US are because of communication issues. »

Head of the Office of Interprofessional Education and Practice - The United States

3. Principal conclusions from two case studies

3.1. Factors facilitating team work

- ▶ **Training.** Working in a multidisciplinary team is not necessarily easy for health professionals. In both cases, the role of training is perceived as an essential element by health professionals to transform the image that various professionals have of each other and to enable teamwork. On Chapel Hill University's campus, interdisciplinary training has been introduced into the curriculum in the first years of university training, as well as throughout the continuous training to help well-established teams to evolve. It helps students acquire new competencies such as building teamwork. Maintaining a collegial culture during internships also helps to cultivate essential values in the multidisciplinary sharing of tasks. The training aims to enable students to understand that there are a variety of complementary approaches to a particular problem, and to teach them how to communicate more effectively with one another.
- ▶ **Salaried jobs.** Most of the healthcare professionals, particularly the oncologists and surgeons, are salaried staff in this hospital. This reduces the competition between physicians and the pressure to increase the number of surgical interventions.
- ▶ **Broader paramedical practices.** The recognition of advanced nursing skills enables the nurses to work with greater autonomy regarding treatments and to cope with various complex situations on their own. They have a fundamental role as care coordinators, which is recognised both symbolically and financially.
- ▶ **Working in the same place (physically).** The fact that the oncologists, pathologists, radiologists, and paramedical professionals all work in the same building facilitates interactions and more spontaneous exchanges.
- ▶ **Institutional recognition and earmarked funding.** Being formally acknowledged as an excellent cancer treatment facility is important for team motivation, but also enables the centre to receive private funding (from donors) to make the organisation more innovative. For the ESRD team, the targeted funding aiming to encourage new care models for integrating different services was also an important impulse.

3.2. The challenges that need to be overcome

- ▶ **Reducing hospitalisations.** Most of the problems for reducing hospitalisations are related to the inadequacy of the primary care and social services and the general lack of healthcare protection in the United States.

The public hospitals treat a high proportion of individuals in very difficult social situations.

- ▶ **Coordination and communication with primary care providers.** The system is highly fragmented in the US, and the hospital teams have very few links with primary care teams, which work relatively independently. They also have different electronic health record systems that are mostly not interoperable.
- ▶ **Hospital payment for cancer patients.** Volume-based payment system creates pressure for increasing the volume of surgeries and repeated consultations. The surgeons are under pressure for improving financial performance of the hospital which sometimes is conflicting with integrated care objectives.

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International Comparison of Specialist Care Organisation: Innovations in Five Countries

England • Germany • Italy • The Netherlands • The United States

Innovating Hospital Services
at the University of North Carolina Medical Center

Lucie Michel, Zeynep Or (IRDES)

Under pressure of increasing demand for healthcare from an ageing population with multiple chronic conditions, France, as other countries, seeks to advance care coordination across primary, hospital and long-term care sectors. Specialists play an essential role in treating patients with chronic conditions, but little attention is given to their organization out of hospitals, and their role in enhancing care coordination and patient-centered care provision.

In order to investigate different ways in which specialists are working out of hospital to integrate primary and social care, we carried out case studies in five countries (England, Germany, Italy, the Netherlands, and the United States). In each study, we examined how specialist care is organised around specific health conditions. These case studies, carried out through site visits between June 2018 and March 2019, explore the organisation of care around patients by describing the coordination of roles and tasks between specialists and other health professionals involved in patient care, with a special attention to their innovative features and underlying financial models. A synthesis of results across five countries is available at: www.irdes.fr/english/2020/qes-248-integrating-specialist-care-with-primary-and-long-term-care-examples-from-five-countries.html

The two case studies in this report describe the innovative services provided by the University of North Carolina Medical Center in the US southern Atlantic state of North Carolina. The first example concerns the investment in teamwork in genital and urology clinic, for improving care for cancer patients, while the second focuses on an initiative that aimed to improve care coordination of patients with chronic renal insufficiency by integrating treatments provided in the hospital and private dialysis centres. They are based on visits organized in North Carolina in February 2019. During the visit, we interviewed health professionals involved in these initiatives, as well as the faculty staff in the Office of Interprofessional Education and Practice, who are working collaboratively to create change in medical practice.

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Études de cas

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