Improving primary care in Europe and the US: Towards patient-centered, proactive and coordinated systems of care

Synopsis of country case studies

Definition of primary care

England and Scotland	First-contact care, accessible by all (free at the point of use), comprehensiveness, coordinated for its population (registered list), activated by patient choice
United States	First-contact care, accessible by all (free at the point of use), comprehensiveness, coordinated for its population (registered list), activated by patient choice
Spain (Catalonia)	Main entry point to care; accessibility, continuity, longitudinality, quality, efficiency; includes preventive and curative care, promotion and health education
Denmark	Underlying principles of free and equal access
Germany	
France	Primary care is to fulfill the following functions: Accessibility, comprehensiveness, coordination, continuity
Poland	
Netherlands	

Summary information

England and Scotland	***Governance:*** - Professional self-regulation strong, specifically in terms of maintaining clinical standards through education, training, registration, etc. - Slowly greater emphasis on external control of clinical behaviour through clinical guidelines, monitoring of quality, patient satisfaction ***Remuneration:*** - payment for main primary care providers based on nationally-agreed contracts across whole UK. → 2004 new contract for general medical services (nGMS) gives practices more freedom to design services according to local needs and encourages better team-working and skill-mix. Key component is Quality and Outcomes Framework (QOF) that rewards practices based on their performance (based on clinical and organisational standards, patient experiences). About 20% of primary care activity is covered in performance-related pay. About half of practice income is achieved through pay for performance.
United States	***Governance:*** - No national system, mostly defined at state and local level - Federal Government involved through Medicaid and Medicare and through support for health care systems serving low-income Americans (eg. Veterans Health Administration, Indian Health Service) - Health care is market driven – payment systems and local practice organizational structures de facto primary care policy makers ***Remuneration:*** - Mainly fee-for-service; in health systems such as Kaiser Permanente, physicians are salaried; some capitation payment - many private insurers established pay for performance programs
Spain (Catalonia)	***System characteristics/governance:*** - Tax funded, decentralized health system; universal coverage; free access; mainly public providers - Autonomous regions responsible for subsidiary legislation, public health, organizational structure of health system, accreditation and planning, purchasing and service provision.
Denmark	***System characteristics/governance:*** Mainly public, financed through taxes (80%) and out-of-pocket payments. - Government sets overall direction of health care, defines goals and objectives - National Board of Health supervises and licenses all facilities incl. GP offices - Institute for Quality and Accreditation established in 2005, responsible for accreditation scheme - Trend towards delegating tasks from GPs to nurses, politically supported by regions
Germany	***System characteristics/governance:*** - Statutory insurance system with universal coverage - System of self-governance: Federal law provides only framework; decisions such what should be included in the benefit basket are taken by joint committees of sickness funds, providers, and to a certain extent patients. → Federal influence is weak, changes are incremental
France	***Governance:*** Lack of clear definition of primary care, or roles of different care providers; no gatekeeping system; large range of professions and organisations that

	provide primary care; existence of specialists in ambulatory care; free access to specialists; principle of „liberal medicine“ (freedom of establishment of providers, free choice for patients, direct access, etc.); geographical variation in number of providers; four levels of governance in health care (national, regional, departments, municipalities);
Poland	***Governance:*** - Primary care consists of medical care (family/primary health care physicians), district care (district nurses and midwives) and social care. - Social care is financed, managed and organized by municipalities. Primary health care (medical care & district care) is financed through social insurance, with one insurer (National Health Fund) that has branches in all 16 regions. - Primary health care is organized according to two care models, equally represented in today's system: 1) Outpatient units that still exist from the old Semashko model. They consist of providers from different specialties (today mainly internists and pediatricians) and are supported by independent specialists. Patients register with one outpatient center. 2) Family medicine practices: In 1992, family medicine was introduced as an independent specialty in Poland. Before independence, family medicine/primary care was undervalued in Poland, primary care physicians were not very well educated, did not have enough equipment, etc. Most diseases were treated directly at specialists. Today, family physicians work in solo (rural areas) and group practices (bigger cities), employ district nurses and have their own patient lists.
Netherlands	***Governance:*** - Private healthcare system since health insurance reform 2006 - new system represents a regulated market: it aims to make citizens (more) aware of health care costs and to introduce a greater market orientation. → more competition - However, new system creates tension between more competition and better cooperation - range of providers negotiates contracts with health insurers - all citizens required to purchase a basic package along with own-risk coverage. Long-term institutional and nursing home care is covered by mandatory special insurance, with an income dependent premium.

Macro level: 1.1 Health system

England and Scotland	**England:** - Purchaser-provider model, emphasis on choice, contestability growing role of private and voluntary sector providers - 152 Primary Care Trusts (PCTs) responsible for purchasing primary care services and for performance monitoring, for continuous improvement of standards and quality; they administer nationally-agreed contracts to core pc providers (GPs, pharmacists, dentists, optometrists) and/or employ other contractual mechanisms to substitute/enhance/provide additional services - PCTs are encouraged to jointly commission with with local authority departments to better coordinate medical and social care. **Scotland:** - Single-system: Community Health Partnerships (CHPs) and NHS Boards jointly manage primary and community health services. CHPs provide wide range of community-based health services, have explicit remit to forge partnerships with local authorities and voluntary sector, they play central role in redesigning care. - Single-system ethos: shared aims, common values, clear lines accountability, breaking down of traditional barriers - NHS Quality Improvement Scotland (NHS QIS) responsible for overseeing standard setting, monitoring, supporting implementation since 2003.
United States	- Rather than macro level, there are numerous meso and local influences: degree of organisation or integration of care; policies and priorities of payers (state, private insurance companies, self-insured employers) ***Evaluation:*** - Structure, process and outcomes largely not measured in systematic way - HEDIS measures to evaluate performance of health plans/providers - Efforts underway to evaluate and certify performance of self-employed physicians - National Committee on Quality Assurance (NCQA) is developing performance measures for primary care, eg. the Physician-Practice Connection—Patient-centered Medical Home (PPC-PCMH) ***Clinical training/role of health services research:*** - No national curriculum focused on coordinating role of primary care providers - Minimum constraints on specialty choice - Some residency training programs are now participating in collaborative improvement activities based on the CCM or the Medical Home ***Health services research:*** - Health services research is strong in the US but translation of finding into practice is slow ***Leadership in primary care reform:*** - Primary care reform no priority for national government at the moment - Some states have made primary care reform a priority due to increasing costs for chronic conditions among Medicaid beneficiaries and state employees - Major primary care professional societies strongly advocate new models of care such as Medical Home and related payment reforms
Spain (Catalonia)	- Purchaser- provider split. Catsalut is purchaser/planner of health services; ICS is main public provider of health services (manages 80% of all

	primary health care teams), other providers include autonomous providers with diverse ownership, consortia, public enterprises, etc. ***Contracting process:*** - Different contracts for different lines of service, but common objectives agreed upon by all providers - Contracting out is based on capitation-based budget allocation adjusted for factors such as age, gender, population, geographical dispersion, income. - 5% of budget is performance based ***Policies to improve primary/chronic care:*** - population-based purchasing (5 integrated care pilots started in Catalonia in 2001); providers in a territory receive capitation payment; providers and purchaser share financial risks for deviation from available budget - at administrative level: collaboration body made up of regional government (DoH, Department of Social Welfare) and municipalities ***Evaluation:*** -Catsalut evaluates objectives contained in contracts each year and pays out performance-based part of remuneration to providers accordingly - External evaluations and benchmarking of providers - Patient satisfaction surveys every 3 years
Denmark	- Decentralized system with regions having main responsibility. Responsibility for prevention/chronic care management shared between regions/general practices and municipalities. Joint development of care plans which will be reported to the National Board of Health. - GP acts as gatekeeper and as coordinator for patients with chronic conditions; 97% of population registered with a GP, allows for continued GP-patient relationship ***Remuneration system:*** - GPs receive combination of fee-for-service (2/3) and capitation (1/3) - incentive payment for diabetes patients to improve continuity in care - fee-for-service for special preventive consultations ***Evaluation:*** - national model for quality assessment and improvement established in 2002. So far, 10% of GPs have their diabetes care assessed through automated data recording IT program; results reported to GP on a regular basis; assessment is to be expanded to cover other chronic conditions - Performance measurement in primary healthcare sector is under development; will become part of general accreditation scheme of the Danish healthcare sector ***Policies to improve primary/chronic care:*** - Danish College of General Practitioners set up special taskforce for improving chronic care in general practice and for improving cooperation with other parts of health care system. These efforts are supported by three national primary care research centers
Germany	- Ambulatory care is provided by both primary care physicians and specialists in mostly solo practices. The ratio of primary care providers to specialists is 2:3 - GPs often compete with specialists to provide fragmented primary care

	- Ambulatory care providers are organized in regional associations of statutory health insurance (SHI) physicians (KVs). KVs contract with sickness funds - Since primary care providers are often in the minority in KVs, their influence is rather weak ***Remuneration system:*** - GPs are paid on a fee-for-service basis. Gradual movement away from single items towards capitation fees based on quarters. - Current payment system leaves morbidity risks with providers. Morbidity-based payment schemes are currently being developed so that risk is shared between providers and payers ***Policies to improve primary/chronic care:*** - During the last years, the federal government has incentivized the development of new models of care by law: introduction of paragraphs that allow for the establishment of DMPs, integrated care contracts, gatekeeping programs - Since influence of federal government in the self-governing health system in Germany is limited though, change depends on activities of self-government members, ie. providers and insurers. There exist a number of activities by providers, insurers, etc. However, activities are often uncoordinated. Academic departments of GP are developing new ways to improve chronic care, eg. development of guidelines, case management models, shared decision making, etc.
France	- Main part of ambulatory health care regulated through national contract between provider association and national insurance company; Departements responsible for managing and providing mother and child services as well as for financing and planning home care for the elderly; Municipalities provide home services fort he elderly; preventive care in schools administered by Ministry of Education; regions responsible for hospitals; mental health governed by still different organisations and levels → no comprehensive primary care concept, navigation complicated ***Remuneration system:*** Primary care providers mostly fee-for-service; GPs receive capitation fee (40€ per year per patient) for coordinating care for patients with defined chronic illnesses → except for capitation part no incentive for cooperation, for preventive actions ***Policies to improve primary/chronic care:*** - For the elderly: CLIC, local information and coordination committees introduced in 2000; one CLIC for 60,000 people. Provide information to the elderly and coordinate health and social services. Promote cooperation in planning and financing of services between different levels of governance. - Networks for health of the elderly were introduced in 2006. Aim is to integrate services across all sectors. - For the chronically ill: Plan published in 2007 that foresees
Poland	- Family physicians and other primary care providers contract with the National Health Fund. - Primary care is provided by family physicians, primary health care physicians (ie. physicians that remained from the old Semashko system and whose training and thus practice is rather specialized), family district nurses, family midwives, providers of rehabilitation services, dentists ***Remuneration system:*** Primary care providers receive capitation fees for all patients registered with them. Providers can increase their income by taking part in prevention

	programs that are remunerated on a fee-for-service/performance model. ***Policies to improve primary/chronic care:*** - Family medicine was introduced in 1992 when the government established a legal frame and a strategy for implementing family medicine in the Polish health system - Social care was separated from health care at the beginning of the 90s. No rules at macro level for cooperation between social and health care providers - At the national level, guidelines for the management of chronic diseases are being prepared. They describe the role of primary and secondary care providers in the care process as well as the areas where cooperation is needed. - Development of "home hospitalization" concept for patients with chronic conditions - Development of disease management programs (?) ***Evaluation:*** - Structure of primary care is measured before care providers are being admitted to enter the care market - Process measurement is done by the National Health Fund and by external evaluators - Outcomes measured by National Health Fund, local authorities, public statistics and also include patient satisfaction surveys - A provider accreditation scheme is currently tested in pilot project. It includes practice structure (also legal), documentation and record keeping, sharing of information among practice staff and patients, usage of guidelines, implementation of patient rights and assessment of their satisfaction.
Netherlands	- Primary care provided by wide range of professionals incl. GPs, dentists, midwives, physiotherapists, pharmacists, psychotherapists, and various types of nurses that contract with private insurers. - Public health policy used to be rather centralized. Now, responsibilities for eg. Prevention and rehabilitation are being shifted from central level to municipalities - regional network of municipal public health services, which take care of child health examination, vaccinations, environmental health, health protection and health promotion activities - New legislations facilitate municipalities to take on their role and responsibilities to connect health, work, living environment, and safety. ***Policies to improve primary/chronic care::*** - Action plan to further strengthen primary care and to promote level of integration was developed by important actors in health care in 2004. - In 2008, the MoH identified four fields of further action, among others care coordination

Macro level: 1.2 Delivery system design

England and Scotland	**England and Scotland:** - GP has a gate-keeping function - Primary care providers/services include GPs (+nurses, curative care, prevention, health education, simple surgical operations), dental care, ophthalmic medical care, pharmaceuticals, NHS walk-in centers (free access to health advice and treatment for minor illnesses at convenient times), NHS Direct (telephone line for 24h advice) **England:** Since 1997 broader perspective of primary care: larger, multi-professional practices that provide wide range of services, "super-surgeries", "polyclinics" with more specialist care available (one-stop health centers); GPs incentivized to manage patients with long-term conditions; broader policy promoting self-care, maintenance of people in their own homes, better integration of health and social care **Scotland:** Single system brought more coordinated management to funding, planning, delivery of primary and community health services. ***Health services research in England:*** - Best Research for Best Health strategy launched in ?, to support research focusing on patient needs; research to be coordinated by the National Institute for Health Research (NIHR) ***Health services research in Scotland:*** Recent creation of Office for Strategic Co-ordination of Health Research (OSCHR) has similar remit as NIHR
United States	- Most primary care delivered in small practice settings, but one-third of primary physicians employed by HMOs and other larger health systems - Primary care is mainly provided by physicians; new models such as the patient-centered medical home are being developed but not yet proven; nurse practitioners and physician assistants are becoming more common but development still at its beginning; primary care team usually consists of one clinician and one medical assistant, nurses are rare in primary care - Coordinating role of primary care is weak due to among others growth of hospitalist movement; fee for service payment model - BUT: Increasing costs for chronic illnesses have led insurance plans and other payers to experiment with new delivery system models such as capitation payment models - Most smaller practices do not have the financial resources and incentives to provide more comprehensive care to the chronically ill. Infrastructure needs to be able to provide more comprehensive care are IT, staff to provide self-management support, case/care management
Spain (Catalonia)	- Primary health care provided at primary health care centers (CAP) where multidisciplinary primary care teams (PCTs) of providers from all sectors work, including social workers - Certain specialties provide services in primary care settings in coordination with community hospitals - CAPs integrate preventive and curative care, rehabilitation and community health promotion - Care outside office hours is provided through 24h continuous attention centers (CACs). Patients can require home visits, schedule appointments via phone or internet. Health care teams regularly visit patients with invalidating chronic conditions at home.
Denmark	- Focus is on improving quality of chronic care through economical incentives and continuous data recording and reporting; diabetes chosen as first condition, other chronic conditions will be included later on

	- For chronically ill/multimorbid patients, GPs develop (shared) care pathways, including regular follow-ups. However, it is well known that continuity, pro-active care and follow-up are often not in place despite well defined care pathways. - Physician shortage leads to calls for more nurses/redelegation of tasks between GPs and nurses - Multidisciplinary teams still rare, except for municipal health centers (where GPs are not allowed to work, only nurses, physiotherapists, etc.) 40% of GPs work in solo practice, rest in group practice with 2-8 GPs and nurses, secretaries. - Primary care system only to some extent able to provide care on continuous basis because lack of economic incentives for continuous care, GP culture does not support proactice care and preventive care only to some extent - no specific training for GPs to support coordination of care ***Health services research:*** - Public health services research underfunded. There exist three national research centers for general practice and primary health care, working on chronic care management programs. However, overall weak emphasis on health services research
Germany	- No formal gatekeeping arrangement; patients have free and direct access to primary care providers and ambulatory specialists - 2004 reform introduced practice fee (10€ per quarter). Insurees have to pay this fee for the first visit to an ambulatory physician and for every physician visit without referral from the physician that was first visited in that quarter. - Since 2007, sickness funds have to offer their insurees gatekeeping programs on a voluntary basis. Financial incentives for providers and insurees are to improve care coordination. However, due to high number of specialists and respectively high supply-induced demand, threshold for referrals is low. -The majority of primary care physicians works in solo practices and employ practice assistants that provide administrative and clinical support to the physician. Professional status of assistants is low which stands in contrast to the expanding scope of tasks they have to fulfil in practices. - Generally, there is good access to primary care. However, physician shortages exist in some rural areas and in the Eastern part of Germany and they are expected to increase. - Federal and state governments are discussing programs to support and promote general practice in underserved areas. Pilot programs were set up to test the establishment of nurse practitioners.
France	- focused on curative care - patients have long-standing relationship with their GP - No financial incentive such as capitation fee for prevention or continuity (which does not mean that GPs do not perform these activities) - 40% of GPs in solo practice; No of group practices still low but increasing; very few multidisciplinary group practices - Team work is informal, relies on trust - Disease-specific local care networks: continuous medical education for members of the network, usually providers from different specialties and sectors; collection and dissemination of information on available resources to treat specific disease; sometimes networks have case managers who provide support with coordination of services for patients - Training of providers is focused on their specialty, only little insight into other specialties/areas of care. Slowly changing for GPs ***Health services research:*** Health services research is not very well developed, not recognized as academic disciplines
Poland	- focused mainly on acute care; preventive programs mainly for children. Type and scope of other programs differ between regions. - Family physicians are able to provide comprehensive care, but often only by demand from the MoH or insurer - Majority of family physicians work in group practices; old Semashko outpatient clinics include mostly pediatricians and internists, often cooperate

	with ambulatory care specialists - Coordinating role of family physician is limited; no unified mechanism ***Health services research:*** Health services research is still in its infancy in Poland. The few physicians that do research often collaborate with colleagues from abroad
Netherlands	- GP acts as gatekeeper to specialized and hospital care, is specialized in common and minor diseases, chronic illness care and in addressing the psychosocial problems related to these complaints - Patients can freely choose provider but must register - About 95% of problems presented in pc are handled at regular practices - 88% solo or small, monoprofessional group practices (2-3 providers) - desire for better working conditions slowly leads to creation of bigger health care centers with professionals from different backgrounds, closely cooperating with nearby hospitals - Also, tasks are redelegated from physicians to non-physicians - BUT at the same time fragmentation of care across caregivers, disciplines, etc. - National system of practice accreditation: assessment focuses on organisational and clinical indicators of chronic care ***Health Services Research:*** - 7% of total public budget for health research, ie. 1.2% of total health care costs, goes into health services research - research is fragmented, a number of advisory councils guide health policy making at national level

Meso level: 2.1 The community

England and Scotland	- Growing trend towards development of integrated primary and community care. Joint strategic planning is commonplace; translation of joint plans into coordinated funding/commissiong streams less often due to fragmentation in funding, administration, organisation and due to different professional cultures.
United States	Meso level comprises local or community factors that influence primary care: - State and local governments are promoting primary care reform because they are looking for more efficient care models to keep down costs for chronically ill, state employees (states responsible for funding significant portion of Medicaid programs) - Health insurance plans: Some strongly promote quality improvement, others mainly managers of costs; problematic because most practices serve patients from different insurance plans, causes conflicts of interest - Medical groups: many larger groups have quality improvement programs, provide eg. electronic medical records, nurse care managers, etc. - Regional improvement coalitions: number increases across the US; consist of major providers, philantrophic or public funding - Coordination between medical services and social or other services is infrequent; practices have only limited access to nurse care managers, exercise classes, etc. - Social and community are a collection of public and private agencies often competing with each other. Cooperation is informal, under-developed
Spain (Catalonia)	- Primary care teams cooperate with social service providers (=municipalities), patient associations, public health practitioners - Cooperation between DoH and municipalities to set up health programs - AUPA (United Action for Health) project in Barcelona integrates public health and primary care: prevention for frail elders, healthy habits promotion, psychological care
Denmark	Only sporadical cooperation between GPs and other local actors – not much experience here.
Germany	- No formal gatekeeping arrangement; patients have free and direct access to primary care providers and ambulatory specialists - 2004 reform introduced practice fee (10€ per quarter). Insurees have to pay this fee for the first visit to an ambulatory physician and for every physician visit without referral from the physician that was first visited in that quarter. - Since 2007, sickness funds have to offer their insurees gatekeeping programs on a voluntary basis. Financial incentives for providers and insurees are to improve care coordination. However, due to high number of specialists and respectively high supply-induced demand, threshold for referrals is low. -The majority of primary care physicians works in solo practices and employ practice assistants that provide administrative and clinical support to the physician. Professional status of assistants is low which stands in contrast to the expanding scope of tasks they have to fulfil in practices. - Generally, there is good access to primary care. However, physician shortages exist in some rural areas and in the Eastern part of Germany and they are expected to increase. - Federal and state governments are discussing programs to support and promote general practice in underserved areas. Pilot programs were set up to test the establishment of nurse practitioners.
France	Cooperation between primary care providers and non physician actors in the community exists but mostly on an informal level. Depends on trust, goodwill, knowledge and communication of individual providers
Poland	Cooperation between family physicians and actors at the community level – who are responsible for eg. preventive programs – is not frequent
Netherlands	- New legislations facilitate municipalities to take on their role and responsibilities to connect health, work, living environment, and safety. - However, meso level plays minor role for primary care providers in improving care – incentives rather come from micro or macro level

Micro level: 3.1 Self-management support

England and Scotland	- Patient surveys show high satisfaction with care, but point out need to improve responsiveness to patients and patient involvement in care - Internationally, UK ranks poorly in terms of patient information on diseases, medicines, etc. - Policies/strategies to support self-management include: NHS Life Check (assessment of lifestyle risks), Drive for a Fitter Britain 2012 (exhortation of healthy lifestyles), Expert Patient and Carer Program (empowering patients, "information prescriptions"), assistive technologies to support people at home, individualized budgets (people can spend social (soon also health) resources directly on services)
United States	- Proven and many unproven community-based self-management support resources offered by patient advocacy groups, hospitals or medical groups - More advanced primary care practices are now developing collaborative goal-setting, action planning, and follow-up. - At the micro level, there is variety in the type and scope of self-management support by single practices/physicians - Patients make increasingly use of the internet to obtain medical information and advice
Spain (Catalonia)	- Prevention and health education are part of benefit basket/functions of PCTs - Trend toward widespread self management: "Expert Patients": group education for patients with specific chronic disease Centre for Chronic Disease Follow-up: nurses do telephone follow-up and education to previously identified chronic patients - Patients very satisfied with care, but patient has passive role due to the fact that demand exceeds supply/doctors do not have enough time to really engage patient in care - Internet plays important role in patient education, changes doctor-patient relationship
Denmark	- Disease-specific patient schools in hospitals. Patient education programs (as developed by Kate Lorig) introduced in half of all communities - Long-standing relationship between GPs and patients; 97% of patients registered with GP, only 5% change GP each year. So far, weak tradition for preventive efforts, but number of well-planned, coordinated chronic care consultations is increasing. - Only few formal patient involvement procedures, but registration model allows for dialogue-centered approach.
Germany	- Practices offer self-management training programs to patients with chronic conditions. Patients enrolled in DMPs are actively being encouraged to take part in such programs. - Availability of large number of online and print information sources; however, often information is biased because it is offered by certain manufacturers, provider groups with vested interests. - Institute for Quality and Efficiency (IQWIG, comparable to the British NICE) is developing independent online information portal - Patient involvement in decision-making varies between providers; scope for improvement especially with regard to involvement of disadvantaged groups (elderly, low income, low education, immigrants, etc.) in care process
France	- Patient associations for specific diseases provide advice and support for patients, lobby policy makers - Research on patient-physician relationship found different models (paternalism, equality, informed relation); push towards more autonomy for patient
Poland	
Netherlands	- consumer organizations play stronger role since privatization of the system in 2006; actively participate in negotiations with insurers, are involved in development of guidelines, performance indicators, etc. - Currently, initiatives to improve access to information for patients and the insured (eg. Development of websites, hotlines, free advice, etc.) - A number of research projects and pilot programs to test new educational programs for self-management

Micro level: 3.2 Decision support

England and Scotland	- Use of clinical guidelines is commonplace, enforced through clinical governance and audit - Variations in quality, especially in chronic disease management, exist
United States	- Evidence-based uidelines are ubiquitous but differ between health plans, between medical groups; there is need for standardization, development of national guidelines - Moreover, systems to embed guidelines into care processes are in early stage of development - For preventive services, there is relatively broad acceptance of a single source of recommendations put forth by the Agency for Healthcare Research and Quality's US Preventive Services Task Force - CME requirement differ by states, wide variety of formats available
Spain (Catalonia)	- PCTs frequently use guidelines - Guidelines available in electronic health records; alerts when dangerous association between prescriptions is detected - CME developed by scientific societies, provider groups, Institute for Health Studies (linked to DoH); CME part of "career escalator" reward scheme
Denmark	- Guidelines developed by GP society. Implementation level unknown. - 10% of GP offices have implemented electronic reminders for diabetes guidelines. Intensive developments regarding computerized decision support systems within general practice setting. But support for such systems much weaker when it comes to agreed decision support systems between different specialties. - CME organized by medical associations; not mandatory, no formal recertification schemes
Germany	- German Society for General Practice/Family Medicine develops evidence-based guidelines for common symptoms and problems - One of the 17 KVs has been developing guidelines for chronic conditions with relevant prescribing volumes - The national working of scientific societies is coordinating the guidelines of its member societies. Results are mixed and often guideline development is dominated by specialists' interests - Most GPs are member of a CME group (quality circles). Participation in quality circles is often mandatory for physicians taking part in gatekeeping programs
France	- Guidelines for providers produced by HAS, but research shows poor usage by providers - Recently, professional guidelines have been adapted for use by especially chronic illness patients
Poland	- Primary care providers and specialists have jointly developed guidelines for some chronic diseases - CME is mandatory for physicians and is controlled and supported by the Polish Chamber of Physicians
Netherlands	- Programs for guideline development exist for all primary care providers - 75% of GPs (?) make use of guidelines - Next to mono-disciplinary guidelines, multi-disciplinary guidelines are being developed and already exist for various chronic conditions - Interdisciplinary guidelines are basis for regional cooperation agreements. - New is development of care standards for chronic conditions that describe the integrated setting within which care should be provided

	- CME includes long-distance learning programs and group seminars

Micro level: 3.3 Clinical information systems

England and Scotland	- Patients must register with to access services, which facilitates care continuity - More than 400 disease registries exist in England alone, which help planning and managing care. But registries differ widely in size, quality, funding source and purpose. - Programme for Information Technology (NPfIT) started in **England** in 2000 to establish joint-up electronic communication system. When completed, system is to include electronic care records, an electronic booking service, electronic transmission of prescriptions, IT supported payment to GPs - **Scotland** launched the National eHealth IM&T strategy in 2004 with the aim to develop an integrated care record jointly managed by doctors and patients
United States	- Most large medical associations have electronic data and measurement programs in place - smaller practices receive measures of their performance from health plans covering their patients - Some regional coalitions provide community measurement which is a promising approach to systematic performance measurement. - Growing evidence that electronic patient data systems (registires) contribute most to improvements in chronic illness and preventive care by making it possible to identify specific populations, stratify based on risk/severity, etc. - Estimates that about 25% of physicians use EHRs
Spain (Catalonia)	- Patient registries mainly used for planning not for managing care - Electronic health records (EHRs) introduced in late 90s; doctor oriented; include diagnosis, treatments, consultations, ancillary services, drug prescriptions) - Electronic health records used by primary care providers for data mining to feed scorecards and to develop research - EHRs of different providers not compatible; Shared Health Record project started in 2005
Denmark	- Patient registries not common in GP offices; only some GPs use registries to plan care for their patients - Electronic patient records exist in nearly all GP offices; however, systems not aligned which makes data transfer among GPs and between GPs and hospitals/municipalities difficult. Standards for data exchange exist in some areas, are being expanded. Lot of good plans to improve data exchange but development hindered by slow development of IT in hospital sector and lack of strong national regulation.
Germany	- GPs have to provide billing information to the KVs in electronic form → electronic documentation of diagnostics and activities - GPs receive little feedback on their performance though. - Lab results usually sent to GPs in electronic form. Specialist letters usually as hard copies - Some local experimentation with sharing of patient records between hospitals and GPs - National law stipulates the development of an electronic health card. Implementation lags behind schedule due to technical problems and data safety concerns
France	- Computer-based medical records widely used but no standardized program → communication between different systems/providers difficult - No databases for specific patient groups - Primary care providers do not systematically share electronic medical records; information exchange rather through secured mail systems
Poland	
Netherlands	- Electronic Prescription Support Program developed by the Dutch College of GPs

	- College of GPs playing an important role in developing ICT for primary care; together with other parties, currently develops standards and guidelines to facilitate communication between providers - Electronic patient files now used in nearly all GP practices - Also, increasing usage of computer software to identify and track patients who have chronic conditions or are at risk of developing them

Further aspects

England and Scotland	
United States	Characteristics that influence efforts to reform primary care: - high number of uninsured persons (47 million) - culture that emphasizes specialty care over primary care - large payment/income gap between primary and specialty care providers
Spain (Catalonia)	Particularities in Catalan health system: - paediatricians are part of primary care teams, being first access for children below age of 14 - multi-provider primary care system - First wave of reform with Primary Care Reform in 1983 - Currently second wave of reform: Primary Care Innovation Plan initiated by current MoH. Driving forces: stronger patient-centeredness, health integration through networks of community health, primary care, social care and public health providers
Denmark	- Strength of Danish system is management of both hospital and general practice by one insurance scheme. But cultural discrepancies between the two sectors and lack of transmural leadership prevents stronger cooperation coordination. Moreover, payment scheme (ffs) is major barrier to willingness to create coordinated, transmural chronic care. - Window of opportunity: Five Danish regions have put improvement of general practice and coordination of care as one of their main tasks for the coming years.
Germany	- Many doctors "obsessed" with high-tech medicine → drains resources for other developments, moves attention away from other, simpler measures that improve care - Most people have a GP and value continuous and individualized care
France	
Poland	
Netherlands	- 1995 Quality in Institutions Act made development of standards, monitoring and reporting systems mandatory for all health care fields. Now, many and sometimes competing or overlapping quality initiatives exist. Challenge will be to integrate different efforts - Still great need to increase integration in chronic care through eg. using specific services or laboratories to monitor and track chronic patients; adopting evidence-based guidelines, critical pathways, and care protocols; instituting self-management and educational programs for patients; and developing collaborations among primary care and hospital facilities.

Main findings: Main drivers for primary care reform

England and Scotland	Redesign of English health system (from state funding and provision to to mixed economy of public, private and third-sector providers) has been driven by: - patient choice and empowerment - access targets - diverse providers - competition (money following the patient) - care out of hospitals - management of long-term conditions - system management (tighter regulations to guarantee safety, quality, fairness, equity, value for money) Scotland has created a vision for the creation of mutual organizations: - patients as partners - networks and partnership working in planning, commissioning, delivery, performance measurement - access targets - shifting the balance of care (care out of hospital) - prioritizing management of long term conditions - tackling health inequalities
United States	- Cost of care is major driver for primary care reform for the insured population - Quality is another driver for the insured, employers and insurers - Lack of access may become an issue in the near future since numbers of medical students choosing primary care residency is decreasing fast
Spain (Catalonia)	Professional dissatisfaction, shortage of professions (GPs, pediatricians, qualified nurses), demographic and epidemiological pressures
Denmark	- Regions are main drivers for reform - Danish College for GPs also plays important role, especially regarding recommendations for planning of care for chronically ill patients - Patient organizations influence political parties, the public - Data on health system performance (eg. OECD data on life expectancy, national data on waiting times) taken seriously, impacts public discussions and decisions
Germany	
France	- Overall: aging society; increase in chronic diseases; rising demand for health care; decreasing number of physicians → focus in French health care is on improving primary care - Lack of medical doctors and desire for better working conditions as drivers to restructure service delivery, skill mix and delegation of tasks and competencies
Poland	- Reform of the Polish primary care system is mainly driven by providers themselves: 1) the College of Family Physicians (developed and promoted the concept of family physician; develop training of physicians based on international experience; promote quality in pc through initiatives such as the Polish School of Tutors 2) the labor union of ambulatory care physicians (fight for good working conditions, adequate payment) 3) by individual doctors (promote the role and importance of primary care for population health at the community level)
Netherlands	increasing number of elderly, increasing number of chronic patients, increasing complexity of needs of patients (multi-morbidity), and increasing

	costs of healthcare associated with these developments

Main findings: Main barriers to primary care reform

England and Scotland	**England** - lack of engagement and trust from medical profession to policy agenda - shortage of management capacity and expertise - lack of policy success in improving access in areas with greatest social needs - policy focus on waiting times has impacted negatively on standard of continuity of care - lack of patient involvement in decision-making - patient responsiveness is weak - shifting resources away from hospitals and into primary/community care lags behind policy intent - lack of care coordination across sectors - continuity of care strained due to increasing specialisation of care, more choices in locations for first-contact care, part-time working and move away from 24/7 care responsibilities - medical focus of general practice means less comprehensive service, though range and scope of care increasing **Scotland:** - Contracts (and associated levers) that are more about inputs rather than on outcomes - Ensuring that profession education and training keeps pace with emerging new models of care - GMS contract (e.g. systematically penalises deprived practices) - Shifting resources from acute lags behind policy direction - Some evidence that public are by-passing primary care (especially out of hours) - Most primary care still delivered in traditional one-to-one consultation - Only recently have primary care clinicians been given education and experience of improvement methodology. - Insufficiently strong incentives to maximise care in the primary care setting.
United States	- shortage of primary care professionals, - lack of IT or inability of small practices to invest in adequate IT infrastructure, - Inadequate payment for primary care providers compared to specialist payment - The lack of a national healthcare system that can provide leadership, coherent planning and financial management, and support quality improvement. - A fee-for-service payment system that creates a large administrative burden on primary care and undervalues important primary care activities. As a result, many primary care practices are struggling financially, have had to reduce clinical staff while adding administrative staff to keep up with paperwork and billing, and can't afford information technology or other practice enhancements. - The organizational and professional isolation of practices that are not part of larger organizations that can help them acquire resources, measure performance, receive continuing education, participate in collaborative quality improvement, and protect them from the confusion and demands of multiple competing health insurance plans.
Spain (Catalonia)	- Service orientation poorly addressed - Financing and management constraints - Limited professional involvement (civil servants) - Weak coordination with specialty care

	- Continuous and urgent care (?)
Denmark	- fragmented system of healthcare provision, lack of transsectoral leadership of chronic care - Payment system (mainly ffs, activity incentives instead of incentives for better quality) prevents better cooperation and quality - lack of national/regional leadership of chronic care initiatives - Incentives and goals are not aligned - lack of performance measures (eg information on prevalence, costs, etc. of chronic conditions)
Germany	- generally low morale and feeling of low reputation among primary care doctors - A political decision-making structure at meso and macro level that favours specialists' interests and hi-tech solutions (overrepresentation of specialists in KVs limits influence of primary care doctors on development of care, on reform; specialists and primary care providers compete for funds with primary care doctors being disadvantaged due to low representation in KVs - looming shortage of primary care doctors in rural areas
France	- Lack of global policy to organize care, to define primary care - Fragmented governance and provision system - Conservatism of French medical profession - Disputes between professions, due to huge differences in remuneration - Current payment system for PC providers (FFS) limits development of preventive and coordinated care - Lack of research and practice in primary care - providers not responsible for a defined population
Poland	- Insufficient number of family doctors (real number lags behind number needed to secure equal access for the whole population – due to long education time for family physicians and emigration of family doctors to other European countries) - Lack of an integrative IT system - Lack of support from the national level (since implementation of the act to introduce family medicine in Poland from 1992, no further legislation that might further promote reform and give direction) - Misunderstanding on the side of public payers, local authorities and other actors concerning the role, responsibility and scope of services provided by family physicians, their role in health care and public health - lack of information dissemination system
Netherlands	- looming prospect of fragmentation of primary care across caregivers, disciplines, and forms of organization causes risk of lack of coordination and continuity in primary care provision - increase in scale of insurers and care providers conflicts with the objective of competition in health care - professional development and acceptance of evidence-based practice are suboptimal in some primary care professions - the use of clinical information systems is still limited - self-management initiatives are still experimental and accessible for only a limited number of patients - fragmented and limited resources exist for health services research information systems (i.e. electronic patient record) is limited

Main findings: Main success factors for improving primary care

England and Scotland	**England:** - patient registration in gatekeeping system enables equal access, long-term coordination of care to people with complex needs - no financial barriers to accessing primary care - capitation funding according to need - use of wider primary care team – reduces demand for more expensive, specialist/hospital care - continuity of care to patients develops trust, makes diagnoses easier, more accurate, improves compliance **Scotland:** - GMS contract (e.g. Patient registers enable co-ordination) - CHPs provide bridge to social care - Information systems enable co-ordination - Scottish primary care collaborative has improved access, patient experience and outcomes - Greater use of a wider primary care team - Long term conditions collaborative and patient experience programme now underway.
United States	- Further development of state and regional public-private coalitions focused on improving care and reducing costs. Most have focused on chronic illness and primary care with special attention to smaller practices. - Payment reform, especially involving Medicare, that supports and rewards infrastructure development, involvement in continuous quality improvement, and those services shown to improve patient outcomes regardless of which member of the practice team provides them. - National consensus primary care performance measures that assess practice structure and patient experience in addition to process and outcome indicators. - Even more aggressive leadership and action by major national professional organizations in support of practice redesign and payment reform.
Spain (Catalonia)	- Teamwork - Central policy planning - Fair trade competition among providers - Consciousness of a second wave reform
Denmark	- Same insurance system for primary and secondary care (should facilitate cooperation, etc) - Standards for data exchange facilitate information exchange (but system integration is still incomplete) - Collaboration between municipalities (responsible for primary prevention, patient education) and more individual-oriented general practice plus disease management programs has potential to improve overall quality of care. [But current governance structure only exists since 2007 administrative reform – long-term outcomes not clear yet]
Germany	- GPs are popular with the public and most patients - Quality circles provide a system for professional learning independent of commercial interests - Governments start to realize that primary care deserves special support
France	- Good access (affordable, reachable, available) - Introduction of a list system (médecin traitant – patients have to register with a GP or specialist) may allow for better research, better care planning - Improvements in training providers: mandatory training period in general practice for all physicians; general practice acknowledged as full specialty; academic situation of general practice has improved

Poland	- Primary care gained reputation after independence from Soviet Union. The Recognition of family physicians has increased (positively recognized profession among public) - Strong self-organized and self-managed societies of family physicians - The existence of leaders of change and implementation of different activities: accreditation, guidelines, specific trainings, peer-review groups, international cooperation and many others.
Netherlands	- primary care at the center of the Dutch health care system, provides high quality care at relatively low cost - a long history of practice guidelines in general practice facilitates a continuous delivery of high quality care - the regulated market orientation, as a result of the system reform, affects relationships between providers, insurers and patients and facilitates a sphere of innovation - the increase in scale of insurers and care providers results in better collaboration, multidisciplinary care (incl. role of nurses) and, as is expected, in higher quality of care