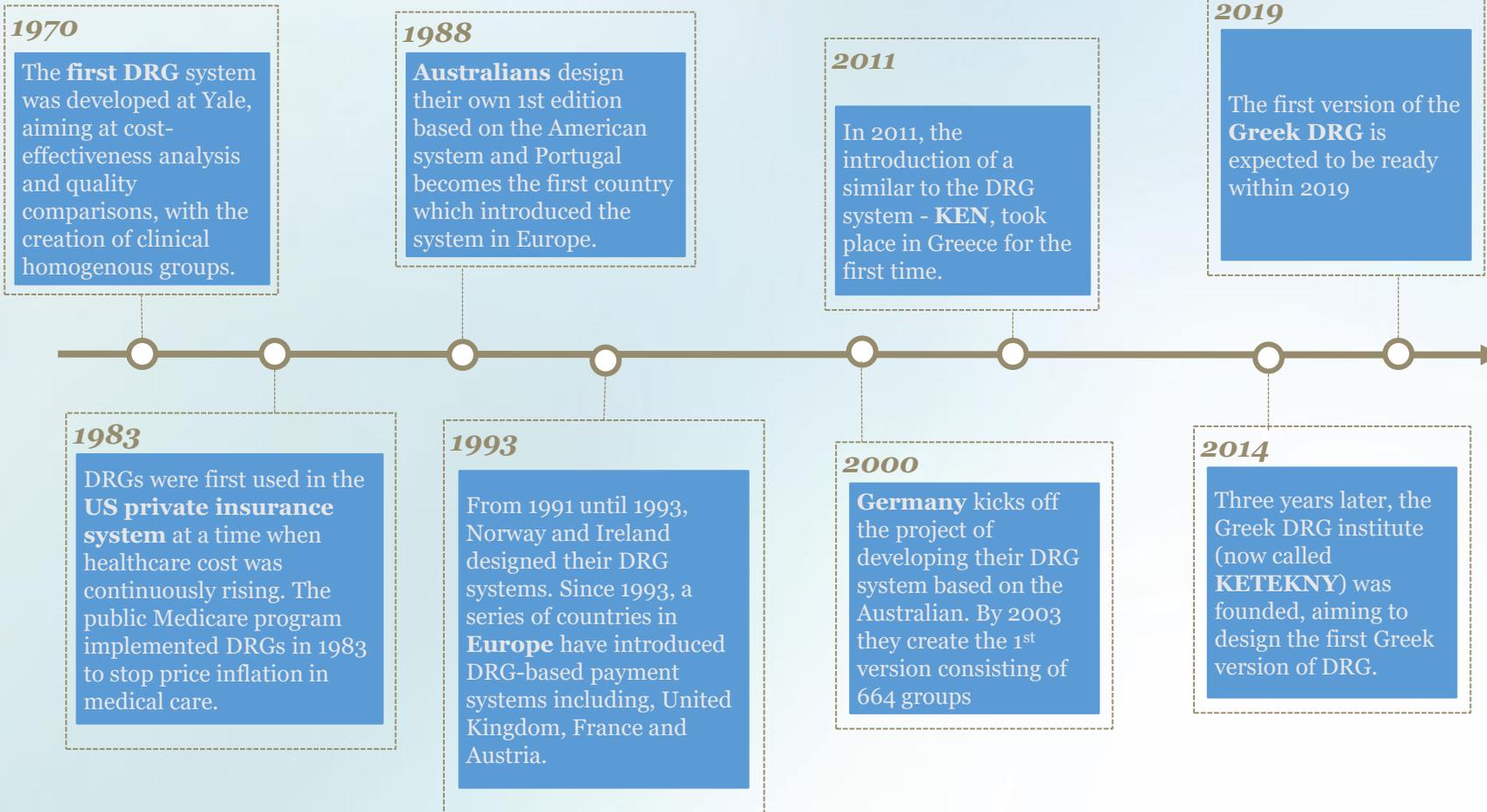


DRGs at a glance



A **DRG** (Diagnosis Related Grouping) system is a **patient classification system** (PCS) that collects patients' discharge data, classifies them in a manageable number of Groups (DRGs), which are **clinically meaningful** and **economically homogeneous**. A DRG-based Payment System is prospective payment system based on DRGs.

DRGs – A well-established payment system in western economies

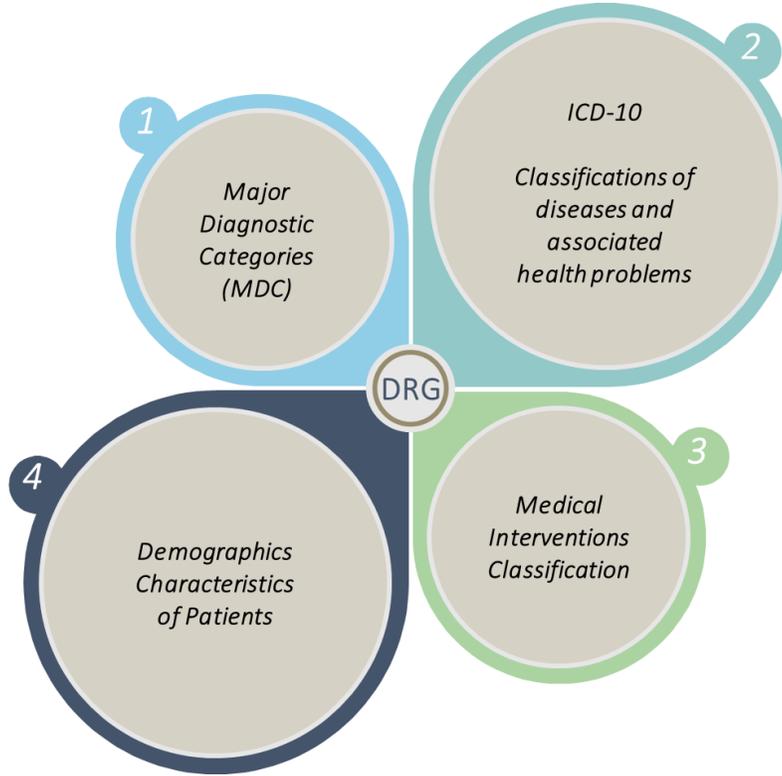


DRGs were firstly developed as a collaborative project by Robert B Fetter, PhD, of the Yale School of Management, and John D. Thompson, MPH, of the Yale School of Public Health.

Key Elements – Major Diagnostic Categories

1) The classification of patients in a specific group is mainly based on **Major Diagnostic Categories (MDCs)** which determine the part of the human body that suffers. This aims to faster and more accurate coding. For each case there is only one category based on which it can be assigned and better described.

4) The final assignment to a specific DRG group is completed taking into account the **demographic characteristic and the discharge data** of the patients. Age, sex, occupation, place of residence are the most common demographic characteristics while discharge data include information about final outcome of the treatment



2) For diagnosis the majority of the systems make use of International Statistical Classification of Diseases and Related Health Problems of World Health organizations, with the 10th version **ICD-10** being the most common used as a basis for the design of each countries' classification.

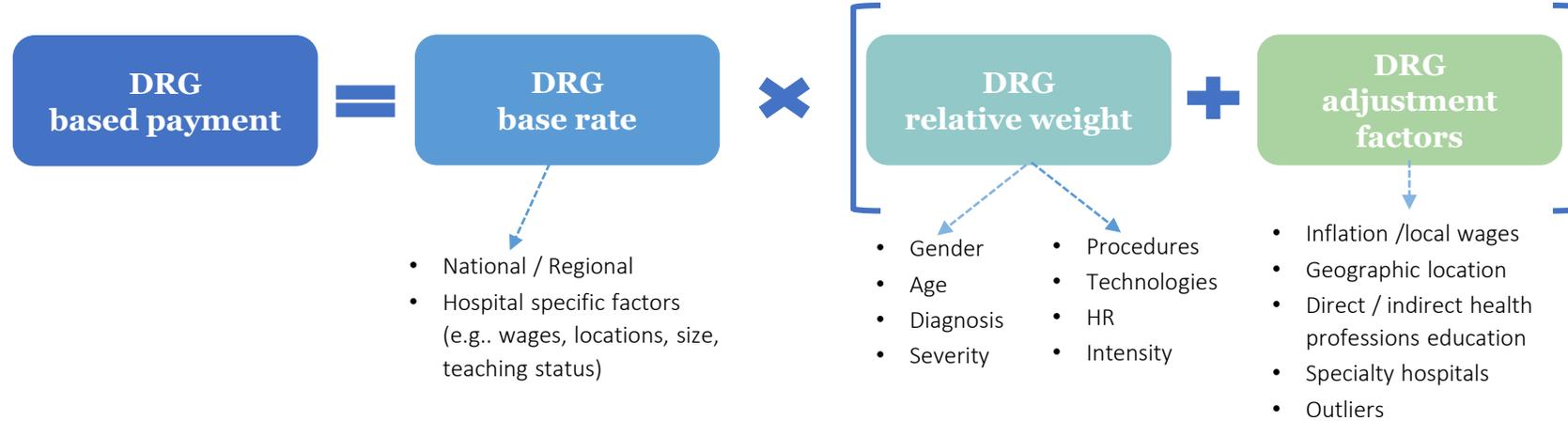
3) Regarding **medical interventions** there is no classification. Typically, countries interested in developing a DRG system design their own classification list or use other classification lists such as ICPM - International Classification of Procedures in Medicine.



In ICD-10 the total disease codes are about 13,000. By using DRG, countries have been able to group them even in just 650 groups (the original German system), making it much easier to manage them.



DRG – Based Payment System



The **Base Rate** is the national average price for all hospital care services. The base rate for each system is usually also a result of negotiations between health service providers and buyers.

A single **relative weight** is calculated which represents the degree of resources consumption for a given diagnostic category.



The digits of each code have a meaning e.g. Code G07A
G: Indicates the main diagnostic category
07: Indicates whether the incident is clinical or surgical
A: Expresses its complexity

Sample of DRG-based payment table

DRG	DRG Description	Weight	Base Rate	DRG-based payment
G07A	Appendectomy, Minor Complexity	0,785	2.000 €	1.570 €
G07B	Appendectomy, Major Complexity	2,378		4.756 €
G10A	Hernia Procedures, Major Complexity	2,105		4.210 €
G46A	Complex endoscopy, Major complex	1,658		3.316 €

DRG – Benefits & Risks



	Benefits	Risks
Buyers	<ul style="list-style-type: none"> More efficient cost monitoring Increased transparency, control and audit trail Avoidance of over-charges Incentives for less expensive health insurance products and higher retention rates. 	<ul style="list-style-type: none"> Increased cases of patient discharges for financial rather than medical reasons Increased cases of patients re-admission without a proper audit mechanism «Cream skinning»: Treating only elite patients.
Sellers	<ul style="list-style-type: none"> More efficient resource allocation and budgeting Improved financial and billing process (no need for separate agreements) Optimization of internal hospitalization protocols Enhancement of hospitals' specialization and reputation 	<ul style="list-style-type: none"> Increased set-up costs (information capabilities, complete and accurate databases and specialized personnel) DRG creep/up-coding
Patients	<ul style="list-style-type: none"> Reduction of the average length of stay and the waiting lists More accurate recording, assessment and use of laboratory and diagnostic tests Lower premiums in long-term 	<ul style="list-style-type: none"> Potential cherry picking of patients and insufficient cost coverage especially for serious illnesses with high costs Inappropriate early discharge ('bloody discharge')

Despite the great benefits and possible risks that such a system may conceal, it is particularly important to be accompanied by a properly structured and commonly accepted control mechanism.

DRG – What happens in Greece



2011

- First attempt to create a DRG-like payment system for public hospitals (KEN)
- The Australian system was used as a reference

2014

- The Greek DRG institute of ESAN (now called KETEKNY) is founded
- Decision to use the German system as a basis

2018

- New board of director formed
- Greek ICD-10 / Greek Medical Procedures Categories
- GR-DRG Database which all will be used for the Greek System.
- A roadmap in place to launch in the next 5 years

The purpose of KETEKNY is to develop and manage an integrated system for the proper scientific costing and compensation of hospital health care in Greece, aiming at the promotion of a evidence-based management Health System.

Requirements of a DRG system and current status for GR-DRG

	Licensing to use an existing foreign DRG system initially as a reference in order to build your own system afterwards.	Completed
	Modification of classification systems for diseases and medical interventions.	Completed
	Identification of dataset specifications and ways of data collection	Completed
	A set of coding guidelines using information from hospitalizations.	Pending
	Analytical billing guidelines able to depict accurately the actual cost.	Pending
	Training of coders and doctors who will be responsible for assignment of DRGs.	Pending
	Collection of data both clinical and financial	Pending
	Design of a grouper algorithm which will be capable to classify incidents.	Pending
	Calculations of base rate and relative weights	Pending
	Design of operating model and selection of DRG usage	Pending



In order to build a stable and efficient DRG system there are 10 key requirements which need to be met



WORK IN PROGRESS 2018

HEALTH: FOCUSING ON TOMMOROW'S NEEDS

Thanks for your attention

