



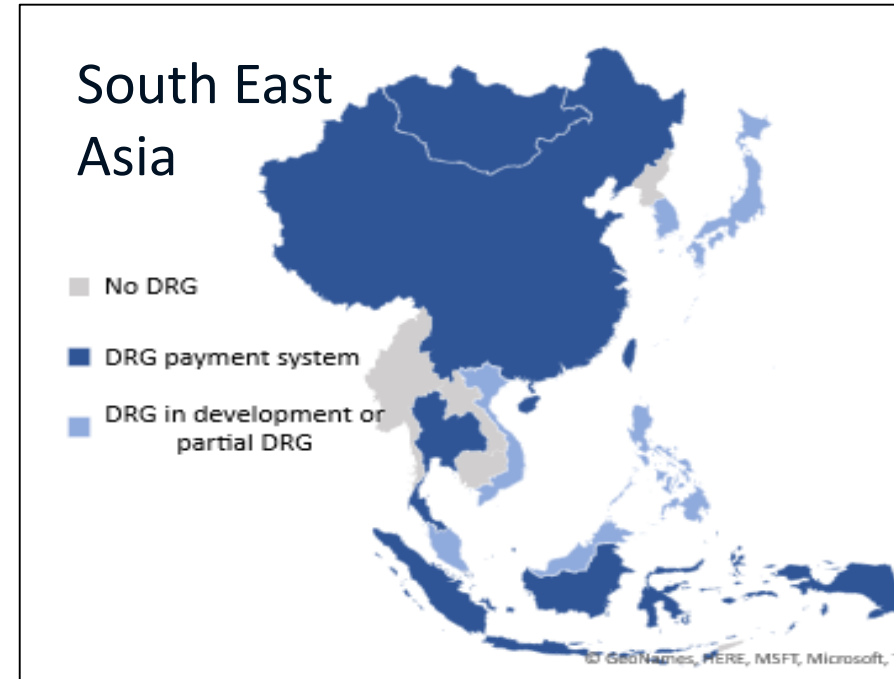
WORLD BANK GROUP
Health & Safety Directorate

Developing a Strategic Phase-in for DRGs: What is the Global Experience?

Caryn Bredenkamp

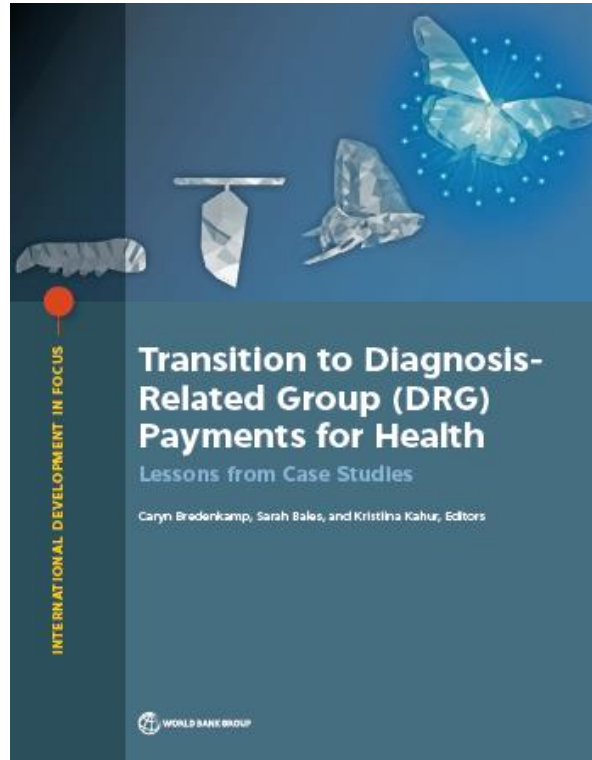
Lead Economist and Program Leader for
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DRGs are widely used as a payment mechanism for hospital inpatient care



DRGs are also used in the Russian Federation, Australia, New Zealand, US Medicare system and some US states...

Lessons learned from nine countries' transitions to DRGs



United States (U.S.) Medicare
Australia
Germany
Estonia
Thailand
Kyrgyz Republic
Croatia
China (Beijing)
Russian Federation

Bredenkamp, Bales and Kahur. 2020. Transition to DRG Payment for Health: Lessons from Case Studies

Transition to DRG Payments for Health – Lessons Learned

1. Be clear about the purpose
2. Early on, establish a DRG unit (or at least a team) to drive DRG development
3. Adopting a grouper, rather than building a new one, makes good sense
4. Hospital charge data, where available, could be used as cost weight proxies initially
5. A hard budget ceiling is needed to prevent cost escalation
6. Phasing in DRGs is needed to learn, adjust, and manage financial risk and political opposition
7. All stakeholders (especially hospitals) should be involved early on; transparency in all processes and decisions is essential
8. A DRG system requires continuous maintenance; DRG transition is never truly complete.

Be clear about your purpose – and communicate it

Efficiency, cost containment and sustainability, transparency and fairness in resource allocation, information

Fee-for-service systems

U.S., Estonia, Beijing, Russian Federation...

- Reduce over-servicing
- Reduce ALOS

=> DRGs without global budgets (and faced continued challenges with cost containment)

Budget-based systems

Most European countries, Australia, Thailand...

- Admit more cases
- Treat more complex cases

=> DRGs with global budgets

Case-based payment systems may also want to progress to DRGs (with global budgets): increased efficiency and fairness in financing, greater transparency, performance monitoring and benchmarking.

Early on, establish a DRG unit – or at least a team – to **drive the transition**

- **Australia:** Australian Casemix Development Program — well-resourced, well-supported, collaborative
- **Estonia:** Team within the Estonian Health Insurance Fund.
- **Beijing:** Beijing DRG Project Team, plus DRG Technical Review Committee to review grouping and relative weights.

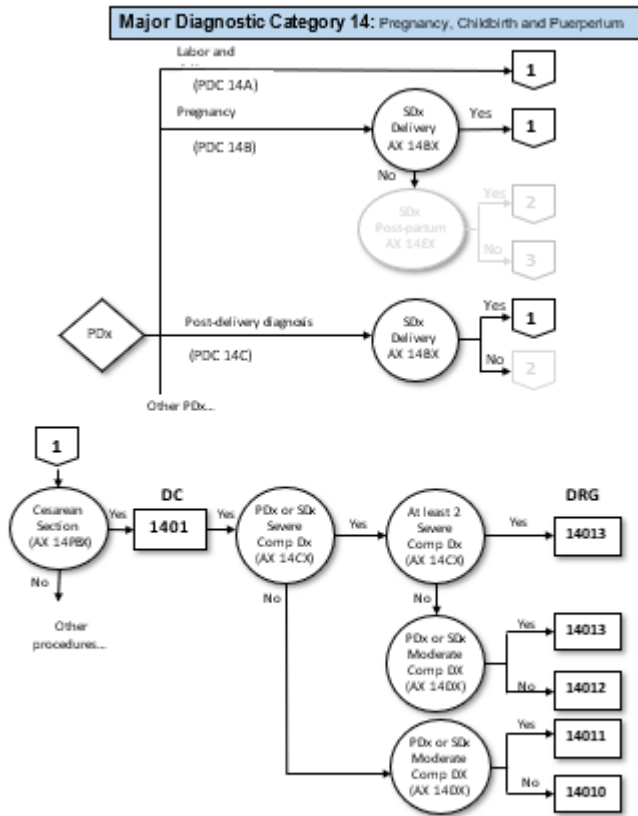
Eventually, institutions that can **maintain** the DRG grouper are also needed.

- Not necessarily located within a national ministry of health or a health insurance fund



Groupers are at the heart of a DRG classification (and payment) system

A grouper (using software/program) assigns treatment cases to a DRG, using data on hospital discharges including on major diagnosis, other diagnoses, medical procedures, patient characteristics, length of stay, etc.



Source: National Health Security Office. 2011. Thai DRGs Version 5.0. Volume 2. Pp. 219-237
 Note: PDC=procedure or diagnosis cluster; Dx=diagnosis; SDx=secondary diagnosis; DC=disease cluster; Comp=complication/comorbidity.

Patient's Data

Age	Age-Day	Sex	Disc Type	Adm Wt	LOSD	LOSHr	PDC				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
(years)	(days)	(1 or 2)	(1,2,3,4,5,8 or 9)	(kgs)	(days)	(hours)					
SDx1	SDx2	SDx3	SDx4	SDx5	SDx6	SDx7	SDx8	SDx9	SDx10	SDx11	SDx12
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Proc1	Proc2	Proc3	Proc4	Proc5	Proc6	Proc7	Proc8	Proc9	Proc10	Proc11	Proc12
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Proc13	Proc14	Proc15	Proc16	Proc17	Proc18	Proc19	Proc20				
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Buttons: Clear Data, Show DRG, Details of DRG Assignment

Results

MDC: DRG:

RW: WTLOS: OT: Adjusted RW:

Error: Warning:

Buttons: Back, Exit

Example: Thai DRG grouping algorithm for C-section

Example: Thai DRG grouper interactive software

Most countries adopt (and later adapt) an existing grouper

- **Build:** U.S. Medicare (pioneer) HCFA-DRG; Russian Federation
- **Adopt:** Most countries adopted their groupers
 - => Australia – adopted HCFA-DRG, then built AN-DRG and then AR-DRG
 - => Germany – adopted AR-DRG, then built its own
 - => Thailand – adopted HCFA-DRG, then AR-DRG, then built Thai-DRG
 - => Beijing B-DRG – follows logic of AR-DRG
 - => Kyrgyz Republic – adopted HCFA-DRG
 - => Estonia – adopted NordDRG (which was based on HCFA-DRG)
- **Which grouper to adopt?** Adoption requires that similar primary diagnosis and procedure coding systems be in place in both countries

DRG phase-in strategy that manages financial risk and allows adjustment

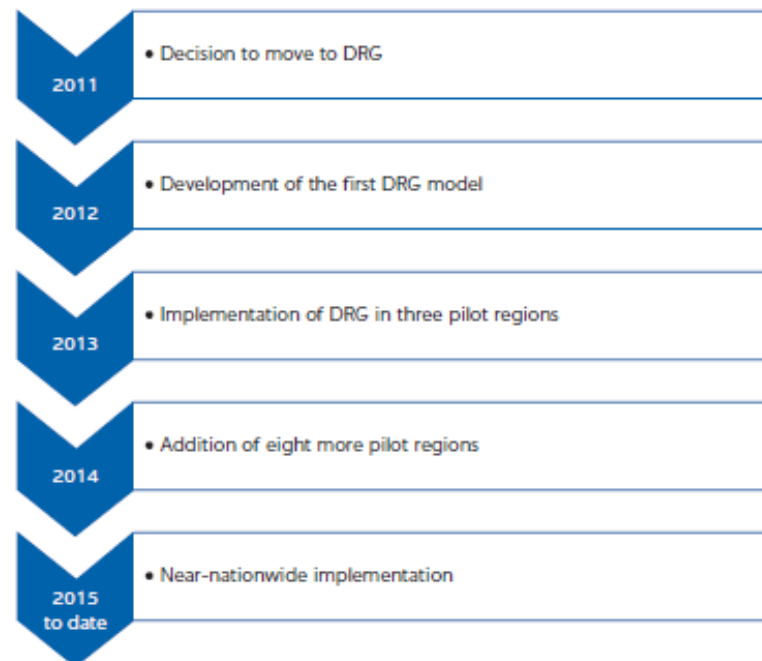
Budget neutral phase

- Report using DRGs, but not yet paid by DRGs => simulate hypothetical revenues
- Piloting – operational issues

DRG scale-up phase

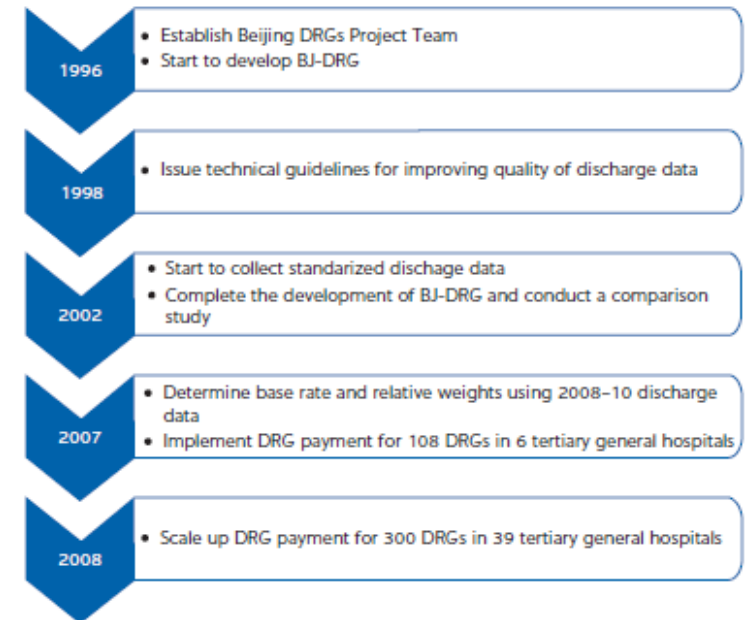
- By geography (Russian Federation, Croatia, Kyrgyz Republic)
- By hospital type (Beijing)
- Partial DRGs (Beijing)
- Other – Estonia, Germany

DRG transition in the Russian Federation



Note: DRG = diagnosis-related groups.

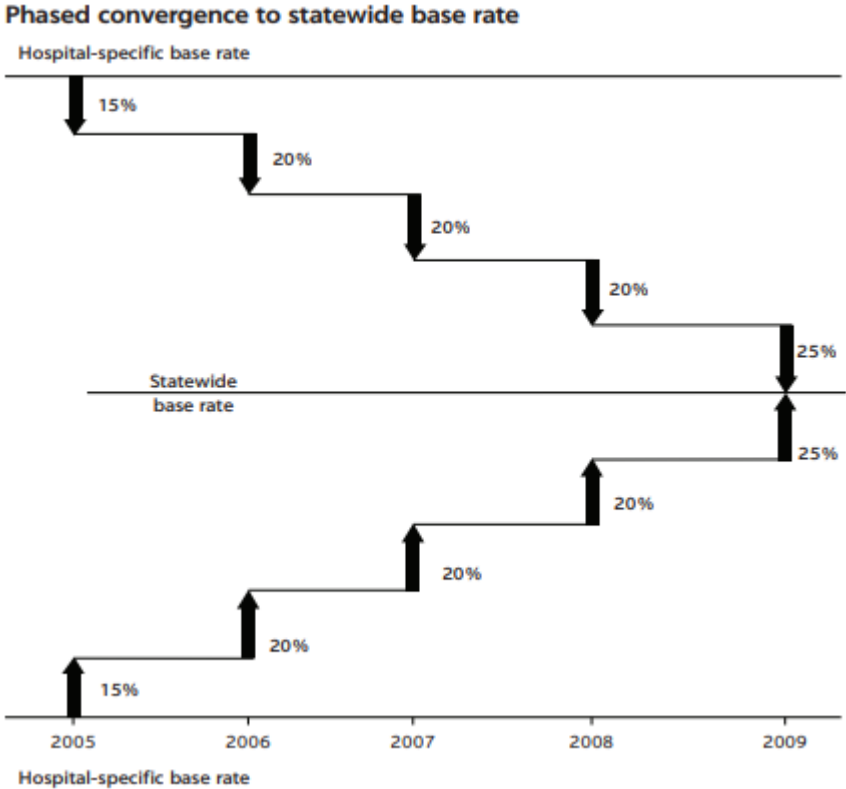
DRG transition in China (Beijing)



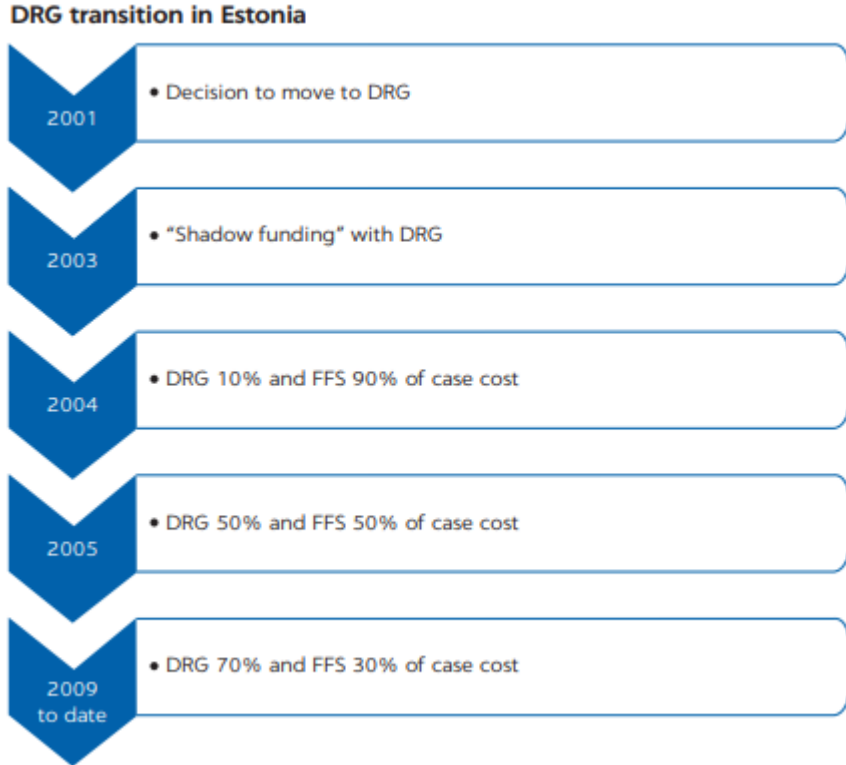
Note: BJ-DRG = Beijing DRG; DRG = diagnosis-related groups.

Germany and Estonia implemented DRGs simultaneously country-wide while still managing the financial risk of providers

Germany



Estonia



All successful DRG transitions takes time

Technical design

- Classification: coding systems (diagnosis, procedure), grouper,
- Costing: RW, global budget and base rates, adjustment factors

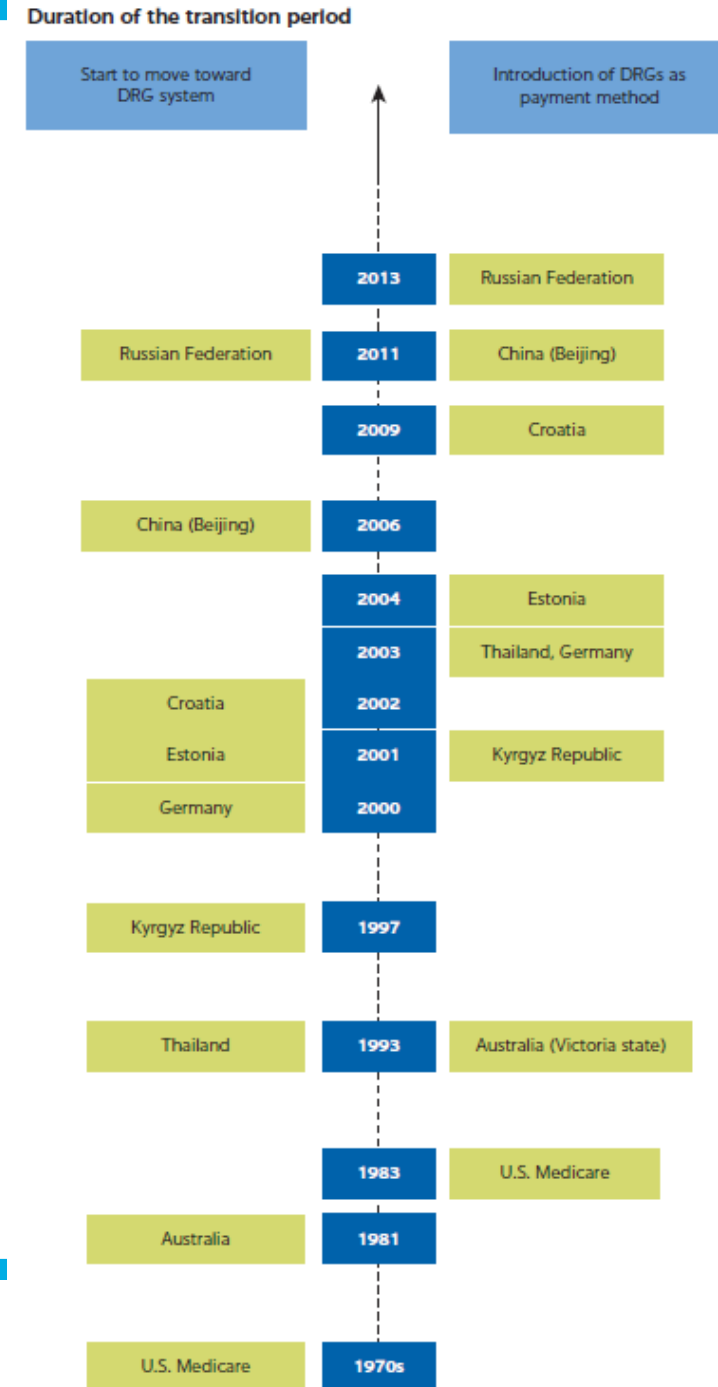
Capacity—building

- Coding quality
- Costing
- Information systems
- Monitoring....

Phasing-in DRGs

- Simulations
- Piloting
- Gradually increasing share of payment that is paid by DRG
- Monitoring and evaluation

Stakeholder engagement



Note: DRGs = diagnosis-related groups.

Thank you