“Casemix”: The model for cutting Australian hospital spending

By Margaret Rees and Mike Head
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At the conclusion of last Tuesday’s Council of Australian Governments (COAG) meeting, Prime Minister Kevin Rudd declared that he and the state and territory leaders had reached an “historic agreement” to deliver better health and better hospitals for the working families of Australia”. He also pointed to the underlying aim to “place the nation’s finances on a more sustainable footing”.

At the heart of the plan is a key cost-cutting mechanism that is designed to ensure a continuous and long-term reduction in the level of hospital funding per patient. It is a market-type mechanism that camouflages the windback behind the appearance of seemingly objective pricing formulas.

The National Health and Hospital Network plan will end block grants to the states and territories for hospitals and instead pay new local hospital networks an “efficient national price” for each service they provide. Hospital networks will keep any surplus if they cut costs. Conversely, they must bear the deficit if they exceed the allocated prices.

The model is similar to the “casemix” system first introduced in Victoria 17 years ago by the state Liberal government of premier Jeff Kennett. The National Health and Hospitals Reform Commission, which wrote the report last year that underpins the Rudd government’s scheme, estimated that a national casemix approach would generate “savings” of between $300 million and $1.5 billion a year.

Asked how his scheme would secure budget savings, Rudd told the COAG media conference: “The introduction of activity-based funding, the use of the Independent Pricing Authority, the funding relationship with local hospital networks—these are deep structural reforms in the health care system, the hospital system of Australia, which will drive long term efficiencies.” No detail has been provided on the makeup of the “Independent Pricing Authority” or how it will set “national efficient prices”.

Casemix is a benchmarking mechanism by which prices are set for all types of surgical procedures and other hospital services. Although casemix formulas are complicated, their essential thrust is to drive down costs, ration patients’ access to costly services, and set hospitals competing against each other in order to avoid closure or amalgamation. Casemix formulas, which apply to both public and private, for-profit hospitals, can be constantly fine-tuned to keep pressure on hospitals to lower their spending. Each time that a hospital reduces its costs, that helps fix a new benchmark.

As reimbursement is also weighted to an average, it often inaccurately measures the complexity and cost of patient care, with the result that tertiary teaching public hospitals are disadvantaged because they perform the most complex emergency operations. By contrast, private hospitals that can specialise in high volumes of less complicated procedures—hip replacements, for example—can reap considerable profits.

Casemix was developed at Yale University in the US during the late 1970s and originated as a payment system in New Jersey in 1980. It is based on Diagnosis Related Groups (DRGs) that classify patients and the resources required to treat them into comparable groups. An important element of DRG measurement is the length of stay (LOS) of each patient. When the LOS decreases, it improves “throughput”—the rate of treatment for a given period—and reduces costs.

Victoria’s casemix scheme (based on specific Australian DRGs) has distinctive methods of driving down prices through the use of a unit of payment that weights reimbursement. In effect, hospitals are allocated workloads, and they must bear the cost if they run over the budget set for those activities. According to the Victorian branch of the Australian Medical Association (AMA), when hospitals near their targets, they put off surgery to ensure that they do not suffer financially.

In recent media reports, Victoria’s hospital system has been described as “the best” and “most efficient” in the nation. In reality, the available statistics suggest that casemix places enormous pressure on hospital administrators, doctors and nurses to push patients quickly through their doors for financial rather than health reasons.

According to the Rudd government’s own Productivity Commission, Victoria has a high rate of unplanned readmissions to hospital—potentially an indicator of patients having been sent home too soon, or treated poorly in the first place. The state’s rate is 6.2 per 100 separations, or patient discharges, compared with a national average of 3.7. Other figures suggest that this poor outcome is related to shorter lengths of stay in Victorian hospitals. While the national average LOS is 3.8 days, in Victoria it is 3.3 days.
The Kennett government’s introduction of casemix was accompanied by a far-reaching assault on Victoria’s public hospitals. In just two years, from 1993 to 1994, the government cut health spending by 14 percent, eliminated 10,000 jobs including those of 3,000 nurses, and shut down hundreds of beds. Despite protests by health workers and local residents, the Kennett government closed 17 public hospitals.

Not all these cuts were caused by casemix, but its introduction played a part. Over the five years from 1991-92 to 1996-97, the numbers of patients churned through Victoria’s hospitals rose by 28 percent, despite fewer hospitals and beds, while average costs per procedure dropped by 25 percent.

Better medical technology has certainly reduced hospital lengths of stay and permitted the greater use of day surgery. But there is no doubt that the casemix model made Victoria the pacesetter for cutting costs and reducing the number of acute public hospital beds. Since 1983, the national figure has been almost halved, from 4.8 to 2.5 per 1,000 people, with Victoria having the lowest ratio of 2.4.

There is ample evidence of Victorian hospitals manipulating their waiting lists to ration entry to acute care beds. Last year, Melbourne’s Royal Women’s Hospital was named by the Age for creating a second “secret waiting list”. Patients nearing a benchmark waiting time, and hence admission, were put on a secret list that effectively stopped the countdown to their admission.

In other states, such as Queensland, publicly recorded waiting times include a patient’s wait to be entered on an elective surgery waiting list. The Victorian waiting time only begins when the patient first receives a hospital outpatient appointment. The wait for such an appointment might last for up to a year. Even so, Victoria is performing worse than the national average on elective surgery waiting lists, with 3.6 percent of patients waiting longer than 12 months during 2007-8, as compared to the national average of 3 percent.

Cost shifting occurs in other malignant forms. It is not uncommon for ambulances to be queued outside emergency departments at major Melbourne hospitals such as the Austin. The hospital will not put the ambulances on bypass, because that earns the hospital penalties, but neither will it admit the patients to emergency. Instead, the delay transfers the cost of supervising the patients to the ambulance service.

In a 2009 submission, the AMA condemned a culture of “do anything” by hospital managements in order to meet key performance indicators (KPIs). The AMA also urged that occupancy rates in Victoria be reduced to 85 percent instead of the current 96 percent—the second highest rate in Australia. While lowering costs to help meet casemix requirements, this over-crowding causes periodic bed crises, especially when major accidents produce sudden influxes of patients.

Politically, casemix permits governments to distance themselves from the consequences of their chronic under-funding of public health. Hospitals compete with each other, imposing their own rationing devices. AMA state president Dr Harry Hemley told the media last month: “Patients are still being churned through the system, but we’re seeing more and more shortfalls in equipment, quality assurance, training, research and programs to keep patients out of hospital.”

It is widely acknowledged that casemix disadvantages smaller hospitals that cannot take advantage of economies of scale—so much so that the Victorian government has been compelled, for electoral reasons, to exempt most rural and regional hospitals from the strict application of the system.

Less known is the fact that casemix is inherently weighted against hospitals in working class and disadvantaged areas, and those with higher numbers of indigenous patients. These hospitals often have to deal with more chronic, serious and complex health issues. Expensive emergency cases represent a higher proportion of their work.

Few studies have examined this. One major Belgian investigation of casemix funding in 60 hospitals, published in 2008, found that low socio-economic status patients have, on average, up to 24 percent longer lengths of stay. It concluded that casemix effectively “penalises hospitals treating a high percentages of low-income people”.

The Belgian experience also highlights the spreading use of casemix internationally, as governments move to outdo each other in curtailing public health care budgets. As with every other aspect of global competitiveness, this is a race without a finishing line, as governments seek to cut public spending and deliver tax advantages to their corporate elites.

Since the current global financial crisis began, the process has been intensified. Health care “reform” has become a central feature of the program being demanded by big business and the banks to restructure every economy at the expense of the working class. Casemix is a key tool in that agenda.