Improving Population Health through Priority Setting in Trinidad and Tobago

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Introduction

Towards the end of the 20th century, it became increasingly obvious in many countries that a 'virtuous cycle' of technological and demographic changes produced ever increasing demands on health systems. Improvements in healthcare (driven by technological advances and other factors) lead to demographic changes (ageing population with a smaller proportion in employment) which in turn lead to greater demand for healthcare. [1] This effect can be illustrated by the example of an angioplasty patient today, surviving cardiac illness to become a cancer patient in the future i.e., today's treatment creates tomorrow's patient. [2] No society can provide all healthcare required for all of its citizens, so healthcare resources can only be used to provide some of the health interventions that society wants. This means that healthcare is in effect always rationed. [3] This combination of wants far exceeding available resources gives rise to scarcity, choice (which interventions to provide) and opportunity cost (which interventions will not be provided). With healthcare wants greatly exceeding a fixed healthcare budget, any interaction between a healthcare professional and a patient necessitates that some other (often unseen) patients are being denied healthcare.

Chalkidou and Glassman (2012) observed that in many health systems:

"Health donors, policymakers, and practitioners continuously make life-and-death decisions about which type of patients receive what interventions, when, and at what cost. These decisions—as consequential as they are—often result from ad hoc, non-transparent processes driven more by inertia and interest groups than by science, ethics, and the public interest. The result is perverse priorities, wasted money, and needless death and illness". [4]

At this time many Caribbean clinicians, administrators and policy makers are asking related questions as economic circumstances, epidemiological profiles and technology options evolve. Such questions include: which new services or treatments to introduce, which ones to scale up, which ones to scale down, whether to replicate existing services in new centres or increase or decrease capacity in existing centres. Such questions are in effect

resource allocation questions in healthcare.

Resource allocation decision-making in Trinidad and Tobago (T&T) has up to now been based on line-item historical budgeting, epidemiological data and health policy largely informed by qualitative assessments. In the public sector, the Ministry of Health (MoH) sets policy, monitors and regulates, while the Regional Health Authorities (RHAs) deliver health services.

Priority setting approaches have taken three broad forms in T&T:

- Consultations
    - E.g., Commissions of inquiry, parliamentary joint select committees,
- Health Governance
    - Through health sector reform and institutional strengthening
- Strategic Planning
    - E.g., Health Needs Assessment, epidemiological reviews, environmental scanning.

Short/medium term changes in the levels of expenditure among the five initiatives in Table 1 provide some examples of changes in priority coming out of deliberations within the approaches currently used by the MoH.

The public health system of T&T has been the subject of sixteen (16) commissions of inquiry, health reviews and healthcare reform exercises since 1934. The findings of many of these investigations generally point to misalignment between services and 'need', wastage, and issues of resource-allocation. Many of these investigations produced dozens or hundreds of recommendations and called for large-scale sweeping agendas for change. Some of these inquiries have pointed to the need for going beyond historical budgeting and epidemiological inputs to include broader considerations that would usually comprise Health Technology Assessment (HTA). This includes the clinical, economic and social evaluation of health interventions in terms of their costs and consequences. The MoH is committed to moving the system toward incorporating such analyses in resource allocation decision making. Indeed the MoH actually bases its analysis on the elements of the WHO priority setting framework for universal health coverage for which it can obtain local data and analyses. [5] The WHO framework includes considerations relating to HTA, but lack of data and analysis prevent these elements from being considered in T&T.

Discussion

Many countries have incorporated HTA systematically in their decision making processes and have developed HTA agencies to undertake their technical work with the MoH playing a role of 'user' rather than 'producer' of HTA. The National Institute for Health and Care Excellence (NICE) in the UK, and the Canadian Agency for Drugs and Technologies in Health are two examples. In Latin America, some countries (e.g. México, Colombia and Brazil) have made progress in HTA, institutionalizing the process through their local agencies.

The HEU, Centre for Health Economics of the University

Table 1. Select Ongoing Public Policy Initiatives in Trinidad and Tobago (TT$)

	2018/2019 Actual	2019/2020 Estimate	2020/2021 Esti-mate
External Patient Programme (EPP)	$66M	$73M	$150M
Infrastructure Development Programme (PSIP)	$260M	$352M	$252M
COVID-19 Parallel Health System	N/A	$216M	$480M *
Chronic Disease Assistance Programme (CDAP)	$69M	$68M	$71M*
National Organ Transplant Programme	$83,782	$170,000	$900,000

** Actual expenditure as at August 2021*

of the West Indies (UWI) has been developing tools for economic evaluation of health interventions for the Caribbean region. In particular, costing studies and health outcomes instruments are essential to any such analysis. [6-8] Such tools allow policy makers to evaluate cost-benefit implications across treatments or illnesses- e.g., evaluating the impact on cost and on population health of scaling up the provision of dialysis, angioplasty or joint replacement or introducing a new drug or service.

This creates an opportunity to move resource allocation decision-making towards HTA-informed explicit prioritization. Internationally there has been a shift away from implicit prioritization towards explicit prioritization. Under explicit prioritization, there are clear, transparent guidelines and resource allocation decisions are informed by analyses.[1] Under implicit prioritization, resource allocation decisions are made without clear, consistent, transparent guidelines. For example, the MoH may provide RHAs with inputs (drugs, hospitals, staff etc) and a basket of services emerges which may be subject to processes described by Chalkidou and Glassman. [4]

Many countries are well into this transition towards explicit prioritization and key lessons have been learned along the way. The more successful approaches have a few things in common[1]:

- Taking an incremental, phased-in approach rather than a broad sweeping agenda;
- Investing in local cost and health outcomes data suited for HTA
- Inclusion of key stakeholders: clinicians, administrators, the public etc.

The ideal scenario would be one in which full clinico-economic analysis can be performed on all interventions for all illnesses. Analysts and policy makers can then explore these results to compare interventions on the basis of cost, health outcomes and other considerations (such as inequality, burden of illness etc) and then make decisions and recommendations. The consideration of all those elements would be impossible even in the most developed health systems. However, recent methodological approaches offer an opportunity to implement these priority setting processes in a feasible manner.

Among the frameworks for applying economic criteria into priority setting, several broad approaches exist which could eventually be adopted in T&T. These are partial approaches: they can facilitate priority setting by considering one or a few interventions at a time. Programme Budgeting and Marginal Analysis (PBMA) is one such approach in which select health programmes are targeted for clinico-economic analysis including the implications for costs and population health of scaling up or down. Programme Budgeting is concerned with the balance between different health programmes, and Marginal Analysis with the balance of different services within each programme. Incorporating generic health outcomes measures like Quality Adjusted Life Years (QALYs) allows comparison across illnesses and interventions. Other approaches attracting attention in the Latin America/Caribbean region include Multi Criteria Decision Analysis (MCDA) and Evidence to Decision (EtD) frameworks in which health programmes or interventions are evaluated on a set of pre-determined criteria using consistent and transparent methods.

Whichever direction the T&T health system takes, a critical first step will be to develop capacity in quantitative analysies to support priority-setting decision making: HTA. This transition from the starting point of T&T in 2021 requires key ingredients:

- Leadership and commitment to incorporating quantitative analysis in priority setting
- Data tailored specifically for the quantitative methods
- Analytical capacity: professionals who can analyse data and communicate results
- Acceptance of the change throughout the system.

The way forward for T&T would be to continue to develop capacity in the required core competencies: costing, economic, and clinical evaluation with the UWI-HEU further developing the role of HTA-Centre by continuing to develop and introduce new tools and applications. The impact will be bolstered by collaboration between economists and clinical researchers, and by collaboration between the UWI and the MoH. As the HEU continues to produce new tools and analyses in economic evaluation, health outcomes and costing, and as clinical researchers continue to produce new clinical studies, the MoH will be provided with new inputs that can be used to further develop resource allocation decision-making to add

considerations of HTA to the qualitative epidemiology-based components of the WHO framework that the MoH currently uses.

The role of the MoH as 'user' of HTA can be enhanced by developing capacity therein through collaborating with the UWI on HTA projects. This would help the MoH to develop its own capacity in interpreting and working with HTA reports. Such discussions are already ongoing.

In summary, the considerations currently used by the MoH for priority setting can be broadened to include HTA-which in turn will include clinical, social and economic analyses. A partial framework such as PBMA can be used to focus such priority setting activities towards the most effective use of the scarce capacity in such technical analyses.[9] This move would best be made at the level of the MoH at this time given the limited analytical capacity to perform and utilize such analyses. As capacity develops, some of these activities can eventually diffuse into the meso (RHA) level.

Finally, HTA is based on local preferences, values, technology and costs. While there is an interest and a need to transition towards explicit prioritization that includes HTA throughout the Caribbean, a regional initiative is not appropriate. The optimal approach for the Caribbean region would be to develop capacity in the countries that are suited to be early adopters, and then have these countries help to develop capacity in the rest of the region, as has been done with costing and health outcomes research regionally.

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