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Resource allocation in surgical departments

In this issue of the *Canadian Journal of Surgery*, a publication by Conner-Spady and coauthors[1] provides surgeons with a validated tool for prioritizing access to hip and knee arthroplasty. This stratagem and others recently published by the Steering Committee of the Western Canada Wait List Project[2,3] have greatly advanced our ability to bring order out of chaos in prioritizing fair and transparent access to surgical care. Although clinical prioritization bears further refinement, it is nevertheless essential for surgeons to take up the challenge to utilize these tools as part of a system to allocate surgical resources such as operating room time, perioperative support, surgical beds and ancillary services. During the 2003 Canadian Surgical Forum held in Vancouver, the Canadian Association of University Surgeons reviewed the principles of resource allocation, discussed methodological options and addressed management strategies to ensure sound allocation.

Several **principles** should guide allocation of surgical resources. First, resources must be considered in light of the needs of the patient. In our publicly funded system the patient "owns" the resources. Operationally, this translates to allocation based on standardized analysis of waiting times consistent with recognized benchmarks and national standards. Second, services must be provided in compliance with funding and interregional agreements. Third, in health regions that deliver research and teaching there must be a commitment to renew resources that support the academic and research mandate. Fourth is the principle of integrity, where allocating resources is an open process shared with patients, providers and provincial partners. Fifth, allocation must meet the principle of sustainability. Priority must be given to procedures for which there are evidence-based indicators that demonstrate appropriateness. Finally, surgical resource allocations impacting on the general health care system must incorporate "systems thinking" that identifies a responsible transfer of resources to support the programs.

Accompanying these principles is a need for clear understanding of the accountability for decision-making. Three levels of accountability rest with regional surgical councils, directors of individual surgical programs and senior executive teams; it is essential that surgeons be represented at each of these levels.

Methodology to adjust allocation of resources needs to be developed. It is key that time needed for urgent surgical access should be allocated first. The remaining time, identified as an elective component, is allocated on the basis of prioritization and carefully managed data on waiting.

Two options are available. The first is a prospective protocol based on booked cases waiting. (This should not be based on case counts alone, since the complexity of individual surgical procedures necessitates consideration of surgical times and effects on resources.) Another option is to use a retrospective approach based on average wait for performed procedures: historical data of average waits, collated by surgeon, service and site, is used to re-allocate time and other resources in proportion to the overall average.

Whichever option is used, key consideration must be given to some allocation issues. One of these is to identify a minimum allocation per

surgeon, irrespective of wait, in consideration of new surgical recruits, subspecialty surgeons and surgeons who have administrative or research activities. A maximum allocation should also be established. In sites that have teaching at the core of their mission, teaching surgeons require time to instruct. Recent unpublished national benchmark data (collected in June of 2003 for the Vancouver Coastal Health Authority by Johnson and Johnson Consultants) show that the average operating time across a wide variety of surgical specialties in community hospitals is 12%–25% shorter than in teaching hospitals. Finally, there must be acknowledgement of services that provide a heavy commitment to emergency calls.

Inevitably, despite the formulation and adjustment of these methodologies, there will be periods of resource shortfalls because of personnel absences, nondelivery or underordering of supplies, epidemics such as SARS, and other, even less predictable variables. In such situations, patients with higher acuity must be offered prioritized access.

A process for **review** of operating-room allocation methodology is essential. A handful of core factors will underlie success. Internal checks must be incorporated that sustain the observance of the principles of resource allocation already identified. The system must be responsive to ever-shifting demands: making changes in allocation must be easy and inexpensive. The process must be consistent and transparent to all members of the surgical department. Inevitable data audits should feature ease and low cost. Most importantly, a patient-centred approach should always benefit the flow of patients through the surgical system.

In summary, significant challenges lie ahead for surgeons to make use of up-to-date tools developed to prioritize patient care in a sophisticated system of resource allocation. This process should reflect organization, problem-solving, quality of care and renewal of academic commitments. Stewardship of precious resources, with key leadership from surgeons, will give citizens access to standardized surgical care in a timely fashion.

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References

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La répartition des ressources dans les départements de chirurgie

Dans ce numéro du *Journal canadien de chirurgie*, Conner-Spady et ses coauteurs[1] présentent aux chirurgiens un outil validé d'établissement des priorités pour l'accès à l'arthroplastie de la hanche et du genou. Ce système et d'autres publiés récemment par le Comité directeur du Projet sur les listes d'attente dans l'ouest du Canada[2,3] ont amélioré considérablement notre capacité de mettre de l'ordre dans le chaos qui règne dans l'établissement de priorités pour rendre équitable et transparent l'accès aux soins chirurgicaux. Certes, il reste encore des perfectionnements à apporter aux mécanismes d'établissement des priorités cliniques, mais il est néanmoins essentiel que les chirurgiens relèvent le défi d'utiliser ces outils dans le contexte d'un système de répartition des ressources chirurgicales telles que le temps en salle d'opération, l'appui préopératoire, les lits en chirurgie et les services auxiliaires. Au cours du Forum canadien de chirurgie de 2003 qui a eu lieu à Vancouver, l'Association canadienne des chirurgiens universitaires a passé en revue les principes de la répartition des ressources, discuté de méthodologies possibles et abordé des stratégies de gestion afin de garantir une saine répartition.

Plusieurs **principes** devraient guider la répartition des ressources chirurgicales. Tout d'abord, il faut aborder les ressources en fonction des besoins du patient. Dans notre système financé par le secteur public, le patient est le «propriétaire» des ressources. Sur le plan opérationnel, cela se traduit par une répartition fondée sur une analyse normalisée des périodes d'attente conformément à des normes nationales et des paramètres reconnus. Deuxièmement, il faut fournir les services en tenant compte du financement et des ententes interrégionales. Troisièmement, dans les régions de santé qui font de la recherche et de la formation, il faut s'engager à renouveler les ressources qui appuient le mandat d'enseignement et de recherche. Quatriè-