National Assembly for Wales

Health and Social Care Committee

Access to medical technologies in Wales

Evidence from Cedar – MT 33

Cedar response

About Cedar

1. Cedar (www.cedar.wales.nhs.uk) is an NHS-academic evaluation centre which is part of Cardiff and Vale University Local Health Board (UHB) and Cardiff University. Cedar supports decision making in healthcare by providing information and recommendations on:
    - Emerging health technologies
    - Medical devices
    - Diagnostic tests
    - Healthcare interventions
    - NHS service configuration
2. Cedar has an established history of evaluating medical devices since 1977 for a succession of UK government funded NHS organisations. Today, the expertise of the Cedar team make Cedar a generalist NHS evaluation centre, able to tackle a wide variety of medical, surgical and general healthcare topics.
3. The Cedar team has expertise in:
    - Critical appraisal of clinical evidence
    - Health economics
    - Clinical device trials
    - Patient registries and data linkage
    - Observational studies
    - Patient reported outcome measures
    - Technical testing
    - Usability studies

How does the NHS assess the potential benefits of new or alternative medical technologies?

4. There is no consistent, scientific or systematic approach in the NHS Wales to assessing the benefits of new or alternative medical technologies.
5. The first step, identifying new or alternative medical technologies, happens by a number of methods such as clinicians attending conferences, talking with colleagues, reading published

papers or being approached by sales people. Cedar is unaware of any systematic horizon scanning within Wales to identify technologies that are clinically effective and may be cost saving. Cedar has a horizon scanning role as part of our work for NICE in its process for selection of technologies for evaluation.

6. Individual clinicians make up their own minds about the potential benefit of a new technology. There may be varying opinions between individual clinicians within the same department or between different organisations. There may be professional reluctance to adopt a potentially beneficial technology and this can be a significant barrier to adoption. There is some justification for differences of opinion or reluctance to adopt based upon usability and compatibility factors. Usability is not necessarily evaluated during CE marking or in published research studies and this remains a significant information gap.
7. Published research on medical devices is often limited in volume and is of poor quality compared with evidence for pharmaceuticals. There are important reasons why device trials may fail to match the standards of pharmaceuticals studies. The device regulatory process is completely different, as is the market. Well conducted research studies are very costly and device manufacturers may be small or medium sized enterprises with limited research budgets. For devices, the time period over which the manufacturer can expect to make a profit is very much shorter than for pharmaceuticals; manufacturers must constantly improve and innovate to produce new products.
8. There may be many devices that have the same function, but achieve this in a different mode of action. Therefore there is a question about whether the devices should be considered as a class (multiple technology) or as a single manufacturer's product (single technology). If a multiple technology evaluation is undertaken, can the evidence reasonably be lumped together? If a single technology, the evidence may be very limited and as the product evolves, a point may be reached when it become sufficiently changed that past studies are no longer valid when applied to the newer product.
9. Research studies on devices are difficult to conduct in the accepted high quality design of 'double blinded randomised controlled trial'. With a device the patient and operator can be aware of whether an active or 'dummy' device are in use, making blinding impossible. Devices may change the complete patient care pathway, which can be challenging for randomisation. It may be necessary to make a considerable investment in a new technology, with the standard procedure being discontinued, leaving only the opportunity of service evaluation rather than comparative research.
10. More vocal clinicians who are persistent in their demands are more likely to get the technologies they want. Unless the decision makers are fully informed and skilled to make judgements between different demands on limited resources, the decision will not always be the best for the organisation overall. Within NHS Wales there are different people making such decisions, depending largely on the purchase cost. Groups involved in purchasing decisions include clinicians (doctors, nurses, therapists, healthcare scientists), general managers, procurement specialists and estates staff. Budget holders and devolved budget holders have authority to spend up to a particular limit.

11. The prioritisation panel set up within Cardiff and Vale UHB was (briefly) an excellent example of a systematic approach to decision making concerning investment in new services or technologies and disinvestment in out-dated procedures. However it is no longer meeting, since there is no funding to progress any decisions even if there is a good case for adoption.

What are the ways in which NHS Wales engages with those involved in the development/manufacture of medical technologies?

12. Individual clinicians may develop working relationships with representatives of medical technology firms.
13. Commercial research allows the NHS to engage with manufacturers.
14. MediWales is a Welsh Life Sciences Forum and the networking and representative body for med-tech Industry, academics and the NHS. MediWales facilitates collaborative working between these groups.

What are the financial barriers that may prevent the timely adoption of effective new medical technologies, and what are the innovative mechanisms by which these might be overcome?

15. The end of the financial year when budgets are particularly squeezed, or in a good year when there may be a potential surplus; this presents a real barrier to effective decision making. Windfall surpluses, when large amounts of money have to be spent quickly, present opportunities and challenges for decision making. Some individuals have pre-prepared business cases that they can submit rapidly, but there may be better ways to spend the money.
16. Barriers also exist between different parts of the organisation e.g. between directorates, and this is a barrier to adoption. There is no incentive to make overall savings in the organisation if your own part of the organisation would incur additional costs. The Clinical Engineering Department in Cardiff & Vale UHB has had many ideas that would make overall savings, but past experience is that they take on additional work to save costs for the organisation, but without the additional resources required. A more holistic approach throughout the organisation may encourage innovation without the current disadvantages.
17. Lack of funding: Cardiff and Vale UHB has no capital equipment budget this year. It has a huge backlog of obsolescent equipment that presents a risk to patients and the organisation but no resources to replace this.
18. The financial divisions between capital and revenue funding, staff and non-staff reduce the flexibility of the system.
19. The re-introduction of the prioritisation panel would help to overcome some of these issues.

What is the need for, and feasibility of, a more joined up approach to commissioning in this area?

20. A more evidence-based, and consistent approach would benefit patients, and the NHS. An important factor in deciding to adopt new technologies is to identify the position in the care pathway where the technology would be introduced. The care pathway is very important because healthcare technologies can be very disruptive, for example moving care between secondary and primary care. It is important to identify the full impact of the technology, otherwise there may be unintended consequences. Introducing such technologies needs careful planning and full engagement of all parties. Care pathways are not always well defined in NHS Wales. Better planning for the introduction of new technologies would present a good opportunity to ensure that care pathways are defined as part of the adoption process.
21. It is important to identify clearly the patient population who might benefit from the technology. Some technologies might have many potential applications, but perhaps clinical and cost effectiveness evidence for one condition. If the technology were applied more widely, then it may not be effective or it may not present good value for the NHS. This requires joined-up thinking potentially across different specialities.
22. The new intervention must be compared with current standard care in Wales, but it may be prudent to consider other alternative technologies that address the same clinical problem. The new technology needs to be placed within the wider context.
23. Usability factors are important as well as clinical efficacy, safety and value for money. Usability needs to be included in evaluation for a fully joined-up approach to commissioning.
24. NHS England is just introducing 'Commissioning Through Evaluation' which allows limited introduction of new technologies and interventions at a small number of centres, with a requirement to gather evidence, for example though a patient registry, and a plan for evaluating the outcome of the pilot.
25. NICE has the Health Technologies Adoption Programme (HTAP), an implementation team that selects pilot sites (for example a large teaching hospital, and a District General Hospital) to implement guidance. The implementation team at HTAP are able to monitor the implementation and identify the barriers and say how these were overcome. HTAP produce a 'site demonstrator' implementation pack to facilitate widespread introduction of new technologies.

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