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UROLOGY - EDITORIAL

Advancing underactive bladder research through public–private collaboration

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Abstract Underactive bladder (UAB) represents an unmet medical need. The proceeds of the 1st international CURE–UAB support allocation of resources and attention via public–private partnerships to advance UAB research. Small investments on the part of public institutes in collaboration with the private sectors can vanguard a serious and sustained global effort toward helping UAB patients.

Introduction

Public–private collaboration as drug development frameworks are increasingly relied on to tackle the most difficult public health problems. Underactive bladder (UAB) symptom complex is prevalent, underdiagnosed, and represents a profound unmet medical need in elderly and other populations [1]. There are no outcome-validated effective drugs for the disease and research on promising candidates has stalled due to confusion on UAB definition [2]. With the backdrop of significant global inadequacies regarding understanding and perception of UAB [3], the 1st International CURE–UAB brought together diverse stakeholders in the field to identify major scientific challenge areas and initiate a call to action among the medical community. In the final paper of this series we call for the development of public–private collaboration and encourage multi-stakeholder partnerships to find consensus on controversial areas of UAB and consequently encourage funding of promising cures.

The 1st International CURE–UAB concluded that lack of concise disease definition, clinical guidelines, or suitable animal models to allow accurate testing of potential therapeutic candidates are the major challenge areas stalling UAB research. These issues are preventing meaningful advancements in UAB at this time. For example, accurate epidemiology studies depend upon having a clearly defined population, and without good epidemiology data the market remains misunderstood and less attractive for investment or study. For years and years research on UAB has languished in this way, yet the public health burden of the disease has only grown.

Discussion

Without effective drugs, patients who suffer from UAB are managed with indwelling catheters, clean intermittent catheterization, or wear diapers. UAB patients using catheters to empty their bladders face long-term medical difficulties, including inflammation and discomfort, the potential for injury, and an increased risk of bacterial infection. Urinary tract infections can lead to kidney damage and are a major cost to health care systems [4]. Additionally, the emotional effects of the disease can feel just as devastating as the physical effects. And for older patients, it can have a major impact on quality of life. Loss of bladder control is a common reason for nursing home placement of the elderly, and as the US population ages, the number of people and associated costs of UAB will continue to escalate. Finding a way to stem these bladder issues would allow for substantial future cost savings while allowing millions more adults to remain independent and productive.

Prominent public and private collaboration examples for other disease areas, which include the immense success of Cystic Fibrosis Foundation drug development model

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(http://www.cff.org/treatments/pipeline/) [5], create precedent and highlight the potential of a powerful mechanism for addressing the difficult problems of UAB. Public–private collaboration works by leveraging on the strengths of different partners. In this context, the public sector in this refers to national government and inter-governmental agencies with the mandate of maximizing net public good. The private sector corresponds to two sets of structures; non-profit enterprises encompassing academia and philanthropies, and for-profit entities referring to commercial enterprises in the pharmaceutical and medical devise space as well as other for-profits. Public–private collaboration arrangements work best when they are mutually synergistic. Governments and non-profit entities can tap into public resources to full fill their social responsibility whereas the private sector, especially pharmaceutical companies, may accomplish their mandate of growth while greatly improving public health, for which they are increasingly finding difficult on both fronts.

Such collaboration can be housed and coordinated by different sources. In particular, national level health departments or ministries, such as the NIH or FDA, are well positioned to create an impetus for driving research efforts and creating a conductive environment to move forward. Although the state of funding for such research projects may be limited in the current budgetary environment, special attention on the part of grant makers to identify projects dedicated to UAB can have a disproportionally large return on investment at this early stage. Grant mechanisms as an example of public–private collaboration are highly fruitful and encouraged for UAB. In addition, funding for cross-industry conferences and "think tanks" such as the 1st International CURE–UAB can do much to bring consensus to controversial areas of the disease and identify areas of need for the public sector. The UAB Foundation (www.underactivebladder.org) was created to encourage, support, and monitor action on the implementation of evidence-based efforts to promote global action on UAB can be partnered with in a number of areas which included CURE–UAB. Among the UAB Foundation, other organizations exist with interest in UAB (www.urologyhealth.org) [6] and could participate or join forces with other public–private sector entities to organize research efforts and patient outreach.

If the public–private sector can work together to make incremental project on the issues surrounding the characterization of UAB, then a critical mass of momentum can occur to give industry the financial motivation to invest and develop cures. It has been noted that the potential market for UAB could exceed expectations just as the overactive bladder and erectile dysfunction markets did in the late 1990s. This is an inherent and appreciable motivating factor which needs to be highlighted for both the public and private sectors to advance the cause of UAB.

Conclusion

The proceeds of the 1st international CURE–UAB, including video of all the lectures are freely available on the UAB Foundation's website [7]; this work provides evidence that addressing the challenges of UAB are not only possible but realistic with a determined effort of directing resources and attention via public–private collaboration. UAB can be a very productive and rewarding area of collaboration for researchers to make a great impact by bring an under recognized disease to normality. Small investments on the part of public institutes in collaboration with the private sectors can vanguard a serious and sustained global effort to ultimately help the UAB patient with limited choices at this time. With the successful completion of the 1st International CURE–UAB planning is already underway for the 2nd International CURE–UAB, and we are exciting to collaborate with individuals and institutions to change the paradigm.

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