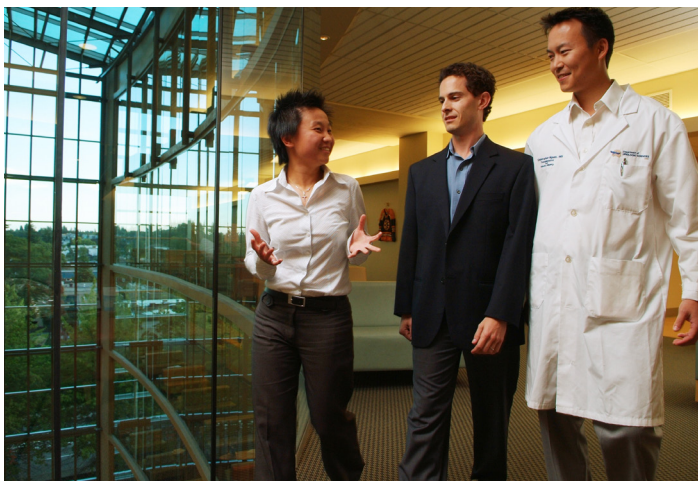


Centre for
**Health Care
Management**
THE UNIVERSITY OF BRITISH COLUMBIA

Operations Research project puts new tool for survival analysis in surgeon's hands



Left to right: Candice Chan, Steven Shechter, Christopher Nguan

In the life and death world of transplant survival prediction, surgeons need easy access to a variety of information about both an organ donor and potential recipients, to make accurate decisions about patient risk and organ allocation. Yet, interpreting the complex statistics and math models that present these data can challenge the most expert physician, particularly in a hectic clinical setting.

This need for effective knowledge translation led to a CHCM Operations Research (OR) partnership between Christopher Nguan, MD (VGH), Steven Shechter, PhD (Sauder School of Business) and their graduate student, Candice Chan, to develop such a tool for day-to-day use by kidney transplant surgeons.

Chan and the team developed an Excel-based mathematical model that analyzes data about both organ donors and potential recipients to streamline organ matching by predicting the probable outcomes of different matches. Such survival analyses on their own are not new. However, the team took the research a step further, by translating the model's statistical output into a user-friendly nomogram – which illustrates graphically the result of the analyses and produces a probability of organ survival 5 years post transplant. The tool is in the spirit of personalized medicine, which clinicians believe is beneficial to patient outcomes.

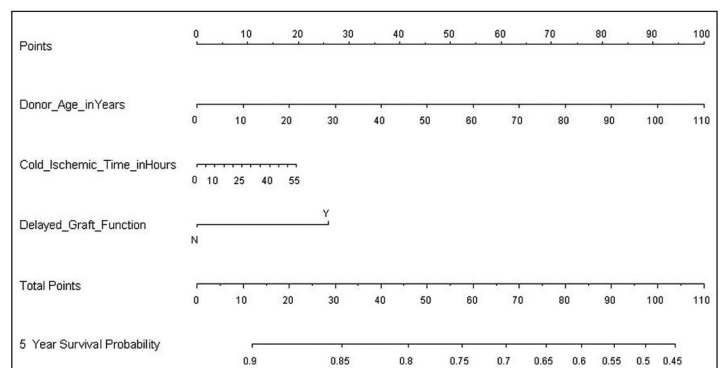
“Usability of the model's output is key to the tool's success. We want to make this statistical analysis process accessible to physicians, who may not have the background or the time to dig into the details of the model itself.”

Nguan commends the team's work. “This tool is exceedingly impressive in its thoroughness and practicality.” Thanks in part to the success of this project, he and Shechter are partnering on several other projects to bring OR into his clinical practice.

“Once those projects take off and I personally show that we can leverage OR in a clinical setting like this with real deliverables and real impact, I expect the demand for OR here to soar.”

For Chan, who now works as an Operations Engineer at Fraser Health, the project provided tremendous insight into the potential of OR to add value to health care planning, management and operations.

“Health care is definitely complex - not something you can solve in one day. But I love the challenges and have a long-term vision. I can already see where I can make a difference here.”



The nomogram allows physicians to analyze data about a potential organ donor and recipient and see the predicted 5 year survival on a probability line.

Workshop on Discrete Events Simulation

Health care managers faced with making decisions under uncertainty are increasingly using the analytical tool of discrete-event simulation (DES). DES models allow decision makers to test “what-if” scenarios and evaluate a variety of outcomes prior to implementing any changes to actual practice. Attendees of this workshop will learn how to model complex health care processes using a popular DES software package (Arena). Participants will come away from the workshop understanding the foundations of simulation modeling as well as acquiring hands-on knowledge of how to construct and analyze a simulation model.

This two-day workshop is suitable for managers and clinicians in the health care system who have at least a basic knowledge of statistics and probability. More information and registration is available through the CHCM website (www.chcm.ubc.ca) or contact the instructor, Dr. Steven Shechter (Steven.Shechter@sauder.ubc.ca).

Participants in last year’s workshop gave it an overall evaluation of 4.2, where 4 is ‘very good’ and 5 is ‘excellent’. Some of their comments:

- “Very professional, great instructor and support”
- “The example worked through on Day Two was the ideal level of complexity and the progression through the problem was appropriately timed.”

CHCM Launches New Website

During the past summer, CHCM launched a completely renewed website. Our purpose is to maintain an interesting and up-to-date site that will provide relevant information in a well-organized and appealing way to visitors.

The home page spotlights a major news story, as well as stories about research and other activities of the Centre. A key feature of the home page is the events section, where visitors can find information about upcoming events and links to registration pages. Information about past events, as well as webinar presentations, where available, is archived on the site for referral.

We hope you visit our new website (www.chcm.ubc.ca).

We look forward to your comments.

The Centre for Health Care Management is a collaboration of UBC faculties and BC health authorities to produce health care management research, translate it into practice, and train health care managers and management researchers. Contact Linda Peritz, Executive Director (Linda.Peritz@sauder.ubc.ca)

Delivery of Executive MBA in Health Care Comes Under CHCM

Beginning this semester, the Centre for Health Care Management has taken over responsibility for the delivery of the Executive MBA in health care on behalf of the Sauder School of Business and the Robert H. Lee Graduate School. The Executive Director, Linda Peritz, has overall responsibility for the program, including marketing, recruitment and financial oversight and Robert J. (Bob) Smith, Adjunct Professor, Sauder School of Business and CHCM Education Director, will play a lead role in strategy and planning for the program. Siobhan Smith is the new Program Co-ordinator. Academic Director for the program is Professor Brian Bemmels, Senior Associate Dean for Academic Programs, Sauder School of Business.

The EMBA is designed for clinicians (nurses, doctors, etc) who are managers, administrators at various levels in the health system and employees of health-related private sector organizations. The program includes foundational knowledge in the areas of accounting, finance, economics, leadership and organizational behaviour, operations, marketing and strategy, all applied to the unique context and complexities of the health care system. Case studies, guest speakers and group projects complement the core activities.

You can obtain more information about this unique program through the CHCM website (www.chcm.ubc.ca), or by contacting Linda Peritz, Executive Director (Linda.Peritz@sauder.ubc.ca).

Learn how to make the best decisions, under pressure.



Introducing the UBC Executive MBA in Healthcare.



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