
INFORMS HEALTH NEWSLETTER

informatics

*Institute for Operations
Research
and the Management
Sciences*

Spring 2001

*Published by the Institute for Operations Research and the Management Sciences
Health Applications Section*

Table of Contents

San Antonio, TX 78212.....	9
Volume 4, Issue 1 (March, 2001).....	14
Special Issue—Modeling the process of care of an aging population.....	14
Health Care Management Science.....	19
Referee Profile.....	19
Name:.....	19
Title:.....	19

Officers of the INFORMS Health Applications Section

President

Liam O'Neill
Policy Analysis and Management
N132 MVR Hall
Cornell University
Ithaca, NY 14853-4401
Work phone: (607) 255-1948
Email: lo22@cornell.edu
Term Expires: 12/31/2002

Vice President / President Elect

H. David Sherman
404 Hayden Hall
Northeastern University
Boston, MA 02115
Work Phone: (617) 373-4640
Fax: (617) 373-8814
Email: h.sherman@nunet.neu.edu

Treasurer

Jon Higbie
Talus Solutions, Inc
Overlook II Suite 1000
2839 Paced Ferry Road SE
Atlanta, GA 30339
Work Phone: (678) 556-5179
Email: jhigbie@talussolutions.com

WebPerson

Allen Holder
Trinity University Mathematics
715 Stadium Drive
San Antonio, TX 78212
Work phone: (210) 999-8241
Fax: (210) 999-8264
Email: aholder@trinity.edu
Term Expires: 12/31/2002

Council

Timothy Butler
Wayne State University
Finance & Business Economics
School of Business
Detroit, MI 48202
Phone: (313) 577-9810
Fax: (313) 577-0058
Email: timothy.butler@wayne.edu

Jon Chilingirian
Brandeis University
Box 9110 Heller School MS035
Waltham, MA 02254-9110
Phone: (617) 736-3828
Email:
chilingirian@binah.cc.brandeis.edu
Term Expires: 12/31/2001

Sharon Schweikhart
Health Services Management and
Policy
Ohio State University
1583 Perry St
Columbus, OH 43210
Phone: (614) 292-6814
Fax: (614) 292-3572
Email: schweikhart.1@osu.edu
Term Expires: 12/31/2002

Past Presidents

Doug Samuelson
InfoLogix, Inc.
8711 Chippendale Ct
Annandale, VA 22003-3807
Work phone: (703) 978-5030
E-mail: dsamuel@seas.gwu.edu
Term Expired: 12/31/2000

Sandra Potthoff
Dept. of Health Care Management
Carlson School of Management
Room 3-140
University of Minnesota
321 19th Avenue South
Minneapolis, MN 55455
Work Phone: (612) 624-9019
Fax: (612) 624-8804
E-mail: Sandra.J.Potthoff-
1@tc.umn.edu
Term Expired 12/31/1999

Yasar A. Ozcan
Williamson Institute for Health
Studies
PO Box 980203
Virginia Commonwealth University
Richmond, VA 23298-0203
Home Phone: (804) 739-5290
Phone: (804) 828-5224
Fax (804) 828-1894
E-mail: ozcan@hsc.vcu.edu
Term Expired: 12/31/1998

David L Zalkind
2731 N Norwood Street
Arlington, VA 22207-5344
Phone: (202) 994-5735
Fax:(202) 994-4068
E-mail:dlz@gwis2.circ.gwu.edu
Term Expired: 12/31/1997

Vicki Smith-Daniels
College of Business
Arizona State University
Tempe, AZ 85287-4206
Phone: (602) 965-6473
Fax: (602) 965-5539
E-mail: vicki.smith-
daniels@asu.edu
Term Expired: 12/31/1996

Farrokh Alemi
George Mason University
1319 Ozkan Street
McLean VA 22101
Phone: (703) 748-1629
E-mail: falemi@mason.gmu.edu
Term Expired: 12/31/1995

Secretary/Newsletter Editor

John Blake
Department of Industrial
Engineering
Dalhousie University
Halifax, Nova Scotia, B3J 2X4
Work Phone: (902) 494-6068
Fax: (902) 420-7858
Email: john.blake@dal.ca

News from the Annual Business Meeting: San Antonio

November 7, 2000 saw the gathering of a small but august group of individuals at the San Antonio Marriott for the Health Applications Section's Annual Business Meeting.

Pierskalla Award

The chief item at the meeting was the presentation of the 1st Annual Pierskalla prize for excellence in healthcare management science. Liam O'Neill, the incoming section president and award coordinator, thanked the judges and all those who had entered a paper into the competition. The quality of papers entered in the competition, was extremely high. While this

provided a challenge for the judges, it also highlighted the excellent research being done by members of the HAS. Honourable mention was made to Prashant Fuloria and Stefanos Zenios. The first prize was awarded to Allen Holder. Allen was on hand to receive the award from its namesake, Bill Pierskalla.

Figure 1 – Bill Pierskalla with Allen Holder

Election Results

The results of the election for section officers were also announced. Congratulations to:

1. VP / President –Elect: H. David Sherman

- Northeastern University Boston, MA.
2. Secretary : John Blake Dept of Industrial Engineering Dalhousie University Halifax, NS
3. Treasurer: Jon Higbie Talus Solutions, Inc. Atlanta, GA
4. Council Representative (2001–2003): Tim Butler Wayne State University Detroit, MI

In addition, a plea was made for a volunteer

to fill the role of webmaster. Sophie Lapierre, who has done a wonderful job with the web page for the past few years, is unable to continue in that role due to illness. Allen Holder, this year's Pierskalla Award winner graciously volunteered to take on this role.

Thank you to all who agreed to serve as officers of the section.

Section Membership/Financial Statement

As of the third quarter of 2000 the section had 209 active members. The current bank account totaled \$7,447.69 (\$US).

A Projector for the Section?

Several individuals commented on the cost of rentals charged by the

conference site
for data

Bad Error

projectors. Of
some concern
was the fact that
individuals

Bad Error

wanting to rent a
projector for
their talk were
required to rent
the unit for the
entire session.
This resulted, in
at least one case,

of multiple
projectors being
rented for the
same session.
Several
individuals
mused about the
wisdom of the
section
purchasing a
data projector
for use at
INFORMS
meetings. After
some discussion
of costs, the
logistics of
transportation
and security,
and the
likelihood of
obsolescence, it
was decided to
table the motion.
In the meantime,
the possibility of
having the
section rent a
projector from
the conference
organizers for
all of the HAS
sessions will be
investigated.

Mystery Door Prize

As always, the
annual business
meeting was a
“happening
time”. The
assembled group
enjoyed the
hospitality of
the San Antonio
Marriott: cheese,
crackers, fruit,
and cookies.
Wine was not in
evidence, in
deference to the
following day’s
US Presidential
Election.
However,
continuing a
tradition started
last year, Sandra
Potthoff
provided
wonderful door
prizes, imported
from the exotic
highlands of
Minnesota.

Winners of this
year’s door
prizes included
Mike Carter and
Liam O’Neill.

Figure 2 – Mike Carter
receives a "mystery
door prize" from Sandra
Potthoff

Figure 3 – Liam O’Neill
receives a "mystery
door prize" from Sandy
Potthoff

Sandra revealed
just a little bit
more about the
mysterious
origins of the
door prize. We

hope that she will
be able to provide
more details at
next year’s
meeting.

More Scenes from San Antonio

Figure 4 – Liam O’Neill
with Joseli Alves–
Dunkerson and Peter
Hilsenrath

Incoming President's Message

During the recent San Antonio INFORMS conference, MIT Professor John Little gave a plenary lecture entitled: "The World is Coming Our Way." The same can be said for the use of MS/OR models in health care: the world is coming our way. The accrediting body for the Master's of Health Administration (MHA) recently made Management Information Systems a curriculum requirement. This reflects the changing face of health care management – from the "old boy" network to local area networks. The demand for experts in health information systems and quantitative methods has increased

dramatically. If recent history is any guide, then health care is poised for an IT revolution of major proportions. As evidence, our section's flagship journal, Health Care Management Science, has expanded from two to four annual issues.

The first annual Pierskalla Prize was a great success. The winning paper, by Trinity Professor Allen Holder, described the use of interior point linear programming to devise a better way of delivering radiotherapy to cancer patients. In reviewing these papers, I was struck by how wide is our umbrella; our research draws from such diverse fields as psychology,

medicine, economics, management, systems engineering, and computer science. Much of this work has had a real impact in terms of influencing managerial and policy decisions as well as patient behaviour.

Our Vice-President, David Sherman, is currently organizing the sessions for the Miami conference. We plan to have several sessions that are jointly sponsored with other sections, such as "Women in OR," and "Data Envelopment Analysis." If you would like to submit an abstract, please contact David Sherman as the deadline is fast approaching.

Also consider submitting a paper for the second annual Pierskalla Prize. You can support our section in many ways, such as by recruiting new members, organizing sessions, presenting papers, reviewing articles, and submitting your work to Health Care Management Science.

Our section attracts a curious type of personage that combines hard-headedness with soft-heartedness. You all have made the section a great success and I thank you for your hard work. I look forward to serving as your President and I will see you in Miami!

**WILLIAM PIERSKALLA BEST
PAPER AWARD IN HEALTH
APPLICATIONS SECTION**

***The 1st
Annual
Pierskalla
Prize***

On November 7, 2000 at the HAS Business Meeting in San Antonio, the results of the 1st Annual Pierskalla Prize recognizing excellence in the field of health care management science were announced.

The competition was coordinated by Liam O'Neill and judged by Timothy Butler (Wayne State University), James Benneyan (Northeastern University), Liam O'Neill (Cornell University), Sandra Potthoff (University of Minnesota), and Vicki Smith-Daniels (Arizona State University).

According to Liam, the judges had a difficult task since a number of excellent entrees were received. Nevertheless, the judges were able to reach a consensus. Dr. Allen Holder of Trinity University was awarded the 1st Annual Pierskalla Prize for his paper entitled *Designing Radiotherapy Plans with Elastic Constraints and Interior Point Methods*. Drs. Prashant Fuloria and Stefanos Zenios received an honourable mention for their paper entitled *Outcomes-Adjusted Reimbursement in a Health Care Delivery System*.

On behalf of the HAS, Dr.

O'Neill thanked all of the contributors for their papers and the judging committee for their hard work.

The deadline for submission of entrees for the 2nd Pierskalla Award is July 31, 2001.

***Pierskalla Prize
Abstract:
Designing
Radiotherapy
Plans with
Elastic
Constraints and
Interior Point
Methods***

*Allen Holder
Trinity
University
San Antonio, TX
78212*

Because cancerous and displasiac cells are more sensitive to radiation than normal cells, external beam radiation is often used to treat such maladies. The idea is to focus radiation beams that are external to the body in such a way that they deposit radiation into a

tumour but do not deposit an abundance of radiation into critical structures. The process of choosing a collection of beams, together with their energies, is called treatment planning. Treatment procedures fall into the two basic categories of radio-surgery and radiotherapy, the difference being that radio-surgery is completed all-at-once and radiotherapy is extended over several smaller treatments (usually fractions of the radio-surgery plan).

We propose a new linear programming model to aid the design of radiotherapy plans. This model incorporates elastic constraints, and when solved with a path following interior point

method, produces favourable plans.

A sound mathematical analysis shows how to interpret the solution, and hence, the treatment planner receives meaningful knowledge about the radiotherapy plan being developed. Preliminary experiments were conducted.

***Pierskalla Prize
Abstract:
Outcomes—
Adjusted
Reimbursement
in a Health
Care Delivery
System***

*Prashant C.
Fuloria and
Stefanos A.
Zenios
Graduate
School of
Business,
Stanford
University,
Stanford, CA
94305*

This paper studies a health care delivery system that consists of two non-cooperative

parties: a purchaser of medical services and a specialized provider of these services. A dynamic principal-agent model that captures the interaction between the two parties is developed. In this model, patients arrive exogenously, receive periodic treatment from the provider, suffer costly complications that require hospital care, and eventually depart the system due to death. The provider chooses the intensity of treatment in each period, incurs an associated cost, and is reimbursed by the purchaser according to observed patient outcomes. The purchaser's problem is to determine a payment system that will induce treatment choices maximizing

total social welfare. The optimal payment system, referred to as the outcome-adjusted payment system, is identified. It consists of a prospective payment per patient and a retrospective payment adjustment based on adverse short-term patient outcomes. This system induces the most efficient delivery of medical services by combining the immediate "threat" of a retrospective payment adjustment with the future reward of prospective payments generated by surviving patients. A numerical example is provided in the context of Medicare's End-Stage Renal Disease program. The example compares the optimal system to systems that

are currently in place. The results suggest that the purchaser can achieve significant gains in patient life expectancy by switching to the outcome-adjusted payment system, but this requires accurate information about treatment technology, patient characteristics, and provider preferences. The life-expectancy gains do not involve increased medical expenditures.

***Call For
Papers: 2nd
Annual
Pierskalla
Prize***

The Health Applications Section of INFORMS is pleased to announce the Second Annual Competition for the Pierskalla Award, which recognizes research excellence in the

field of health care management science. The award includes a \$500 honorarium for the best paper presented in a Health Applications Section sponsored session at each fall INFORMS conference. The award is named after Dr. William Pierskalla to recognize his contribution and dedication to improving health services research and delivery through operations research. Dr. Pierskalla is currently a professor at the Anderson School at UCLA, and serves in an editorial capacity on numerous operations research journals. Details of the award include:

Eligibility: Any paper presented in a session sponsored by the Health

Applications Section during the INFORMS fall annual meeting is eligible for the award. However, to be considered for award, a full paper must be submitted by July 31, 2001 to the Vice-President of the Health Applications Section. The paper must be presented at the Miami INFORMS conference to receive the award, although the judging will be based on the written paper. The paper can be a working paper, submitted paper, or published. If desired by the authors, the winning paper will be published in Health Care Management Science if it has not been published or is not under review elsewhere.

Judging: Papers will be judged by a panel of

four representatives of the Health Applications Section on contribution to operations research/management science in health care, readability, clarity and organization of the paper, technical content and scope relative to the length of the paper, and originality. The panel judging the papers reserves the right not to award a prize in any given year.

Application Process: Contact David Sherman to submit your abstract for presentation in a Health Applications Section sponsored session. Four copies of the written paper must be submitted to David Sherman by July 31, 2001 to be considered for the Miami award. If there are multiple authors, they

must state in writing how they wish the honorarium to be distributed at the time the written paper is submitted.

For more information, contact: H. David Sherman 404 Hayden Hall; Northeastern University; Boston, MA 02115 ; E-Mail: h.sherman@nuneu.edu Phone: 617-373-4640 Fax: 617-373-8814

Other News

Yasar A. Ozcan has been appointed as Director of Williamson Institute (WI) for Health Studies, at the Department of Health Administration, Virginia Commonwealth University (VCU).

Yasar has been director of VCU's Office of International Development. He will continue to coordinate the VCU-Kazakistan School of Public Health Partnership Project which is funded until October, 2001. Under his new responsibilities at WI, Yasar will focus on new research and non-traditional educational services development.

~
Lawrence M. Seiford is the new Chairman

of Industrial and Operations Engineering at the University of Michigan-Ann Arbor. He assumed this position in September after spending the past 3 years at the National Science Foundation as Program Director of Operations Research and Production Systems. In November he traveled to Marseille to receive the degree Docteur Honoris Causa from the National Ministry of Education of France in a special recognition ceremony at the Universite de la Mediterranee, Aix-Marseille II.

Dr. Seiford can be reached at:

Lawrence M. Seiford,
Professor and Chair
Dept. of Industrial and

Operations Engineering
1205 Beal Avenue, Room 1877
The University of Michigan
Ann Arbor, MI 48109-2117
USA

Voice: (734) 764-9422
Fax: (734) 764-3451
email: seiford@umich.edu

~
Doug Samuelson, immediate past president of the Section, has a new job as a Science Advisor, Center for Information Technology, IIT Research Institute, Lanham, Maryland.

~
Dr. John Blake, HAS Secretary has been cross-appointed to the Department of Anaesthesia at the Dalhousie University Faculty of Medicine.

The following article originally appeared in The New York Times, November 14, 2000.

Artery Cleaning and What Spells Success by Eric Nadour

When it is time to choose a surgeon, given the choice between young and inexperienced and older and seasoned, most patients would probably choose the latter.

But for a least one procedure, a new study argues, they would be wrong.

Researchers, writing in the September issue of the journal *Neurology*, report that when it comes to carotid endarterectomies – operations in which plaque is removed from an artery in the neck to reduce the risk of stroke – the longer a

surgeon has been in practice, the worse outcome.

Indeed, wrote **Dr. Liam O'Neill**, as assistant professor of Policy Analysis and Management at Cornell, for surgeons who received their licenses 20 or more years ago, the mortality rate for the procedure was about double that of surgeons with fewer than 20 years' experience. (About one in a hundred of the more experienced surgeons' patients died.)

One possible explanation: surgeons who have been in practice a long time may be reluctant to adopt procedural improvements, the researchers said. Or it may be that older surgeons rely heavily on unseasoned medical residents.

The results, they said, lend weight to arguments that there should be independent audits of surgical results.

Carotid endarterectomies have been on the rise as their effectiveness has been established. The study examined the results of 12,725 operations preformed by 532 surgeons over two years in Pennsylvania.

The study also found that surgeons who did too few – one operation a year or fewer – had comparatively poor results.

~
Amy Wilson recently joined the faculty in Health Services Research and Policy in the School of Public Health at the U. of Minnesota. Amy may be reached at:

Amy R. Wilson
Assistant
Professor
Division of
Health Services
Research and
Policy
School of Public
Health,
Phillips–
Wangensteen
15–228
University of
Minnesota
420 Delaware
Street SE, MMC
729
Minneapolis,
MN 55455

~
**Visit Our WEB
Site at:**

[www.trinity.edu/
aholder/HealthA](http://www.trinity.edu/aholder/HealthA)
[pp](#)

Report from the Editor of Health Care Management Science

HCMS: The Year in Review

The year 2000 marked another successful period in the history of *Healthcare Management Science* (now published by Kluwer Academic Publishers). Along with the successful publication of Volume 3, HCMS was listed for the first time in the Medline database. This marks another remarkable accomplishment for this noteworthy journal sponsored by intellectual capital of INFORMS Health Applications Section members.

While we at HCMS are proud of these accomplishments, our eye is on

the future. One of our major goals for this year is to be listed in the ISI database. ISI has been considering HCMS for some time. To speed up the process, please e-mail them (journals@isinet.com) and recommend that *Health Care Management Science* be included in their database. HCMS is a top-quality journal and deserves this recognition. Be sure to make note of HCMS's recent addition into the Medline database. In addition, we will be putting out a special issue on simulation this December, which is to be edited by Jim Anderson. Anyone wishing to contribute a paper to this issue should contact Dr. Anderson at:

James G.
Anderson, Ph.D.
Professor and
Director
Social
Research
Institute
Department
of Sociology
and
Anthropology
Purdue
University
1365 Stone
Hall
West
Lafayette, IN
47907-1365
Phone: (765)
494-4703
Fax: (765)
496-1476
E-mail:
andersonj@sri.soc.purdue.edu

Upcoming Publication Schedule

The current list of Volume 4 issues is as follows:

Volume 4, Issue
1 (*March, 2001*)

*Special Issue—
Modeling the
process of care
of an aging
population*

♦ **Editorial**
T. J.
Chau
ssalet

and
E.
El-
Darzi
♦ **Health
care
modeling
and
clinical
practice.
Theoretical
exercise
or
practical
tool?**
D. G.
Seymour
♦ **Data
requirements
in a
model of
the
natural
history of
Alzheimer's
disease.**
Thierry J.
Chaussalet
and
Way

- ne A. Thompson
- ◆ **Using a continuous time hidden Markov process, with covariates, to model bed occupancy of people aged over 65 years**.
Georgina Christodoulou and Gordon J. Taylor
 - ◆ **Developing a Bayesian Belie**
- f Network for the management of geriatric hospital care.
A.H. Marshall, S.I. McClanean, C.M. Shapcott, I.R. Hastie and P.H. Millard
- ◆ **A simulation study of the Winter Bed Crisis**. V. Vasilakis and E. El-Darzi
 - ◆ **Implications of**
- mixed exponential occupancy distributions and patient flow models for health care planning.
Gary W. Harrison
- ◆ **Practical experience with bed occupancy management and planning systems: an Australian view**. Mark Mackay
 - ◆ **Modelling hospital and social care bed occupancy and use by elderly people in an English**

- health district.**
Peter H. Millard, Georgina Christodoulou, Carol Jagger, Gary W. Harrison and Sally I. McClennan
- ♦ **Analysis of bed use and occupancy following the introduction of geriatric rehabilitative care in a hospital in Huesca, Spain.**
J.A. Carcia-Nava and W.A. Thompson
- Volume 4, Issue 2 (June, 2001)*
- ♦ **Cost inefficiency in Washington hospitals: a stochastic approach using panel data.**
Tong Li and Robert Rosenman
- ♦ **Comparing teaching and non-teaching hospitals: a frontier approach.**
Shawna Grosskopf, Dimitri Margaritis and Vivian Valdmanis
- ♦ **The technical efficiency of hospitals under a single payer system: the case of Ontario community hospitals.**
- ♦ **Alternative methods to examine hospital efficiency: data envelopment analysis and stochastic frontier analysis.**
Thomas S. Oruc and Deepika Nath
- ♦ **Alternative methods to examine hospital efficiency: data envelopment analysis and stochastic frontier analysis.**
Rowena Jacobs

- ◆ **A simulation modeling approach to evaluating alternative policies for the management of the waiting list for liver transplantation.**
Julie Ratcliffe, Tillal Eldabai, Tracey Young, Martin Buxton, Andrew Burroughs, Ray Paul, George Papatheodoridis and Keith Rolles
- ◆ **Modeling and analysis of multi-state accesses to elective surgery.**
Boris Sobolev, Peter Brown and David Zelt
- ◆ **Towards decision support for waiting lists: an operations management view.**
Jan M.H. Visser, J.D. (Hans) van der Bij and Rob J. Kusters
- ◆ **Explaining inequality in the use of public health care services: evidence from Spain.**
Rosa M. Urbanos-Garrido
- ◆ **Managed care, vertical integration strategies and hospital performance.**
Bill B. Wang, Thomas T.H. Wan, Jan Clement and James Begun
- ◆ **AID S policy modeling for the 21st century: an overview of key issue**

Volume 4, Issue 3 (September, 2001)

- s. Mari on S. Rauner and Margaret L. Brandeau
- ◆ **Measuring efficiency of long-term care units in Finland.** Magnus A. Bjorkgren, Unto Hakkinen and Miika Linna
 - ◆ **A quality-adjusted cost function in a regulated industry: the case of Dutch nursing homes.** Jos L.T. Blank and Evelien Eggenk
 - ◆ **The use of virtual worlds and animated personas to improve healthcare knowledge and self-care behavior: the case of the Hart-Snee game.** Barry G. Gilverman
 - ◆ **Risk Transaction Organization: Determinants of Information Technology Outsourcing among Health Maintenance Organizations.** Douglas R. Wholey

Contents and abstracts of issues in first three volumes are available at: http://www.baltzer.nl/hcms/hcms_contents.asp

Call for Referees

To ensure the continued success of Health Care Management Science, manuscript referees are needed. Nominate, or volunteer yourself or a colleague, for this important activity. Included is a form used to submit a candidate for consideration. A broad spectrum of expertise and viewpoints is needed and useful to maintain and develop this vibrant journal. Critical review of submitted articles ensures quality of publication. A greater number of referees can also improve publication turn around times. Be a sport, do something fun and intellectually stimulating. Get the jump on the latest research and results! Fill

out the form and send it to the editors

Professor Yasar A. Ozcan

Department of Health Administration
P.O. Box 980203
Virginia Commonwealth University
Richmond, VA 23298-0203
USA

Voice: 1-804-828-5224
Fax: 1-804-828-1894
E-mail: ozcan@hsc.vcu.edu

Professor Peter C. Smith
Centre for Health Economics
University of York
York YO1 5DD
England

Tel: +44 - 1904 - 433 779
Fax: +44 - 1904 - 433 759
E-mail: pcs1@york.ac.uk

Referee Profile

Name: _____

Title: _____

Affiliation: _____

Address (where to mail correspondence):

Phone number: _____ e-mail: _____

Fax number: _____

Please list your specialty areas of expertise and/or interests in OR/MS and health care applications:

Specialty #1: _____

Specialty #2: _____

Specialty #3: _____

Specialty #4: _____

Specialty #5: _____

Comments/Suggestions for HCMS:

Upcoming Meetings

The INFORMS-CS is sponsoring sessions on health applications of statistics at the INFORMS Miami Conference. It will be held November 4–7, 2001. Papers are being requested for this session. Submit paper title, abstract, and author contact information, no later than March 9, to Martha A Centeno. E-mail: centeno@eng.fiu.edu.

informatics Operations Research
and the Management Sciences

The Canadian Operational Research Society is sponsoring sessions on health care and health care applications at their annual conference. This year's conference will be held in Quebec City, Quebec from May 6–9, 2001. Papers are requested. Please send paper title, abstract, and author contact information, no later than April 1, 2001, to John Blake. E-mail: john.blake@dal.ca. For more information see www.fsa.ulaval.ca/scro-jopt.

The next INFORMS Annual Meeting is scheduled for November 4–7, 2001 in Miami Beach, Florida. The Healthcare Applications Section is sponsoring several sessions. To submit a paper, please contact H. David Sherman at: h.sherman@nunet.neu.edu.