**OBAIS Seminar Series**

**Bundled Payments For Healthcare Services: Proposer Selection and Information Sharing**

**Dr. Diwakar Gupta, Ph.D.**  
Program Director, Service Enterprise Systems (SES) and Manufacturing Enterprise Systems (MES), 
Directorate of Engineering, National Science Foundation  
Professor, Industrial and Systems Engineering Department &  
Director, Supply Chain and Operations Research Laboratory, University of Minnesota

**Friday, October 31, 2014, 10:00-11:30 PM, 608 Carl H. Lindner Hall**

**Abstract:** The Centers for Medicare and Medicaid Services (CMS) has introduced a “bundled payments for care improvement” initiative. Each bundle pertains to a specific medical condition, a set of linked services, and a length of time referred to as an episode of care. Proposers choose bundles, design service chains, and propose target values of quality metrics and payment per episode. Expert panels evaluate proposals based on CMS-announced relative weights, but there is no limit on the number of proposers that may be selected. Moreover, there is no minimum score that will guarantee selection, which makes selection uncertain for proposers. We develop normative models for the parameter selection problems faced by potential proposers within the CMS' proposal selection process. Proposers have private information about their costs of achieving different quality targets, which determine their equilibrium responses. We show that an optimal strategy for CMS, under its current approach, may be to either announce a fixed threshold or keep the selection process uncertain, depending on market characteristics. We also formulate and solve the proposer selection problem as a mechanism design problem, which reveals that CMS' current approach is not optimal. We present policy guidelines for government agencies pursuing bundled payment innovations.

This is joint work with Mili Mehrotra, University of Minnesota.

**Biography:** Diwakar Gupta is currently the Program Director, Service Enterprise Systems (SES) and Manufacturing Enterprise Systems (MES), Directorate of Engineering, at the National Science Foundation. He is a Professor of Industrial & Systems Engineering at the University of Minnesota. He is an affiliate senior member of the Health Services Research, Policy, and Administration Division of the School of Public Health and a Faculty Scholar of the Center for Transportation Studies. Diwakar received a Ph.D. in Management Sciences from the University of Waterloo. His research focuses on healthcare delivery systems, state transportation agencies’ operations, and supply chain and revenue management. Diwakar's research has been funded by a variety of federal and state agencies (e.g. Agency for Healthcare Research & Quality, Department of Health and Human Services, National Science Foundation, and Veterans Health Administration), as well as industry sponsors. His papers have appeared in all major journals in the field of Operations Research/Management and several of his papers have won best paper awards. Diwakar has held a variety of editorial appointments, including co-editor-in-chief of the Flexible Services and Manufacturing journal and Departmental Editor of Supply Chain Management and Healthcare and Policy departments of IIE Transactions. Information about his research projects can be found at the web page of his research lab – Supply Chain and Operations Research Laboratory – [www.isye.umn.edu/labs/scorlab](http://www.isye.umn.edu/labs/scorlab).

*For information about the OBAIS Seminar series, contact Uday Rao, [uday.rao@uc.edu](mailto:uday.rao@uc.edu), 513 556 7138*