

## Appendix

### *Assignment overview*

**Name of Assignment:** Expand Wikipedia stub on supplier-induced demand

**Learning Objective(s) Targeted by this Assignment:**

1. Critique the credentialing of healthcare professionals.
2. Identify the welfare implications of recently enacted or currently proposed policies
3. Identify over-utilized and underutilized medical services

**Additional Objective(s) Targeted by this Assignment:**

1. Contribute health economics expertise to public knowledge repository

**Total points:** 75/500 course points

**Components:**

1. Individual bullet point list
  - Individual writing assignment
  - Due week 3
  - 20 points
2. Group charter
  - Group writing assignment
  - Due week 5
  - 0 points (ungraded)
3. Group bullet point list

- Group writing assignment
- Due week 8
- 20 points

#### 4. Final article section

- Group writing assignment
- Due week 11
- 35 points

#### 4. Submission to Wikipedia

- Group writing assignment
- Extra credit
- Due by week 11
- 15 points

#### **Resources:**

- Each component is a separate assignment with instructions in the corresponding week's assignments folder
- Each component has a grading rubric in the Course Rubrics folder of Course Resources
- Our textbook contains material on supplier-induced demand
- There is a discussion board dedicated to this assignment

#### **How to get started and proceed**

The first part of this assignment is a list of at least five bullet points. Look at the article, available at [http://en.wikipedia.org/wiki/Supplier\\_induced\\_demand](http://en.wikipedia.org/wiki/Supplier_induced_demand). Think about what is missing, and what you might like to add. It might help for you to pick an audience that you will target: your boss, your friend, or even your mother. What would they like to know about the patient-physician relationship? How would you try to explain it to them? The outcome of your assignment is a bullet point list, but other techniques might help organize your thoughts. You can try posting your questions to the discussion board dedicated to the assignment, for example. In

the end, you will submit a list of bullet points via Blackboard by the end of week 3. Look at the grading rubric—the lists that receive full credit will include emerging issues.

The second part of the assignment is a group list that combines the individual lists into a list of at least eight bullet points. I will assign students to their groups. Each group will develop a group charter specifying mutually agreed upon roles and responsibilities. After the group charters have been completed and approved, members will swap lists within their groups, describe their intended audiences to each other, and then combine the lists. This should be more than pasting one list onto the other, as you will have to eliminate overlap and decide if you want to add new bullet points. Look at the rubric—the lists that include references will receive full credit. References can be academic, come from our textbook, or reside on credible websites. Each group member should submit a copy of the identical synthesized group list via Blackboard by the end of week 8. Each group member receives the same group grade.

The final part of the assignment is for a group to produce a section of an article by building upon the group's topic list. Each group will take the list that they have created and come up with a single heading that they want to write their article section around. The heading is just the title for the article section, with the idea that, in Wikipedia, entries are composed of articles that have different sections. For health insurance, headings could include "Health plan vs. health insurance" and "Comprehensive vs. scheduled". Once your group has your heading, you'll turn your bullet points into full sentences to create a section for your article as a set of paragraphs. If it helps, you can think of the section as a short paper that you are writing with a group. The rubric shows that I will grade you on four different dimensions—formatting, use of bullet points, references, and style. Each member of a group should turn in the same version of the assignment via Blackboard, and each group member will receive the same group grade.

The extra credit portion of the assignment is to submit your work to Wikipedia. This is a decision you will have to agree on as a group since your work will be going up on the Internet. However, only one group member needs to post their work. Posting will involve getting a Wikipedia user name if you do not already have one, and inserting your section into the supplier-induced demand article. Then, you should take a screen shot to prove that you posted the article online. Even though only one person will post the section on line, all group members will receive the extra credit for completing this part of the assignment.

**Notes:**

- All required components should be submitted via the Blackboard assessment tool as Word documents:
  - Individual bullet point list
  - Group bullet point list (each person submits copy of group doc)
  - Group article section (each person submits copy of group doc)
  - Submission to Wikipedia (one group member edits Wikipedia, takes a screen shot, and submits it)

*Individual assignment file*

**Name of Assignment:** Expand Wikipedia stub on supplier-induced demand—individual bullet points

**Learning Objective(s) Targeted by this Assignment:**

1. Critique the credentialing of healthcare professionals.
2. Identify the welfare implications of recently enacted or currently proposed policies
3. Identify over-utilized and underutilized medical services

<b>1.</b>	<b>Type of Assignment:</b>	Individual writing assignment
<b>2.</b>	<b>Grading Method and Point Value:</b>	20 points/500 course points
<b>3.</b>	<b>Instructions (What to do and How to do it):</b>	1. Generate a list of main points you would use to explain the concept of supplier-induced demand to a college educated layperson 2. Submit list (minimum 5 bullet points) as outlined below by Sunday, 11:59PM
<b>4.</b>	<b>Required Resources (lab equipment, software, etc.):</b>	MS Word Web browser

5.	<b>How to complete and submit:</b>	1. Submit your individual bullet list via MS Word document on this page by Sunday at 11:59PM
6.	<b>File naming convention, if applicable:</b>	1. Individual bullet list:  Wiki_bullet_indiv_lastname_firstinitial_yyyy_mm_dd (for example, Wiki_bullet_indiv_lieberthal_r_2012_05_13)
7.	<b>File format, if applicable:</b>	.doc
8.	<b>Due date/time:</b>	Week 3, Sunday, 11:59PM (May 13, 2012)
9.	<b>Additional guidance, if any:</b>	For the stub, see  <a href="http://en.wikipedia.org/wiki/Supplier_induced_demand">http://en.wikipedia.org/wiki/Supplier_induced_demand</a>  A grading rubric is available in the course resources section

*Individual assignment rubric*

*Wikipedia stub grading rubric—bullet points*

This rubric is for use with the Wikipedia stub activity. This activity involves adding to an incomplete article on Wikipedia. This rubric applies to the individual bullet point assignments.

<b>Criteria</b>	<b>Nonperformance (0 points)</b>	<b>Basic (5-10 points)</b>	<b>Proficient (11-17 points)</b>	<b>Distinguished (18-20 points)</b>
<b>Individual bullet point list</b>	Subject: Health economics <ul style="list-style-type: none"> <li>• See <u>Economics of Health and Healthcare</u></li> </ul>	Subject: Medicare <ul style="list-style-type: none"> <li>• Passed in 1965</li> <li>• Covers seniors</li> <li>• Part of Center for Medicare and Medicaid Services</li> <li>• Health insurance</li> </ul>	Subject: Medicare <ul style="list-style-type: none"> <li>• Passed in 1965</li> <li>• Covers seniors</li> <li>• Frequent reforms</li> <li>• Covers some under 65s</li> <li>• May undercompensate physicians</li> </ul>	Subject: Medicare Modernization Act <ul style="list-style-type: none"> <li>• Passed in 2003</li> <li>• Expands Medicare to cover drugs</li> <li>• Enacted as Medicare Part D</li> <li>• Included “donut hole” gap in coverage</li> <li>• Donut hole being phased out under the PPACA</li> </ul>

Covers facts and possible areas for discussion	Fewer than five bullet points completed. Bullet points do not relate to the subject matter.	Fewer than five bullet points completed. Points only cover simple facts about the subject.	Five bullet points completed. Points cover facts and concepts.	Five bullet points completed with specific subject heading. Points cover facts and concepts and include emerging issues.
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*Individual bullet point example*

Wiki Individual Bullet Point List

Subject: Supplier Induced Demand

- Agency relationship between physicians and patients
  - Asymmetry of information influences
  - Moral hazard influences
- Physician incentive structures influence pattern of care and demand
  - Current FFS system and how it could support supplier induced demand
  - Target income hypothesis
  - Proposed models under health care reform, such as Accountable Care Organizations, and how physicians are compensated in these models could affect supplier induced demand
- Professional Uncertainty Hypothesis
- Medical interventions that may experience supplier induced demand as specific case study examples for supplier induced demand
  - Imaging services
  - Surgical interventions
  - Psychiatric services
- Patient advertising and marketing to encourage demand for some services
- Alternate explanations for variations in medical intervention utilization

*Group charter assignment*

**Team project charter  
HPL 540: Health Economics  
Wikipedia stub assignment**

**Session: HPL540 Health Economics, Spring 2012**

**Project Title: Wikipedia stub assignment**

**Team:** [names of team members]

**Project Start Date:** 2/6/2012

**Projected Finish Date:** 3/25/2012

**Project Description and Contribution to Learning:**

Learning Objective(s) Targeted by this Assignment:

- Discuss the goals of cost benefit analysis, cost effectiveness analysis, and cost utility analysis.
- Identify the welfare implications of recently enacted or currently proposed policies

Group membership will be decided by the instructor during the fourth week of class. You will have until the end of week eleven to complete this assignment (an individual component is due in week three and a group component is due in week eight). You will also have a chance to discuss your group work during the virtual live office hour in week six.

Working in groups, write a section of an article on Comparative Effectiveness Research. Final assignment submissions must be a SINGLE, cohesive section.

**Grading Rubrics: Available in Pulse under Course Resources in the folder Grading Rubrics.**

Roles and Responsibilities: **[list the role(s) each person in your team will take on and the corresponding responsibilities]**

Schedule: **[provide a schedule that allows for all members of your team to conduct and review parts of the assignment]**

Group decision on submitting the article to Wikipedia: **Yes/No**

Special Considerations, if Any

Identify anything that needs to be part of this agreement that doesn't fit in one of the other sections.

Project Initiation Sign-Off: **[This agreement is considered signed off when each member of the team submits an identical, consensus copy of the document via his/her respective Blackboard assignment submission tool.]**

*Group charter example*

**Team project charter  
HPL 540: Health Economics  
Wikipedia stub assignment**

**Session: HPL540 Health Economics, Spring 2012**

**Project Title: Wikipedia stub assignment**

**Team:**

John Smith

Jane Jones

**Project Start Date: 2/6/2012**

**Projected Finish Date: 3/25/2012**

**Project Description and Contribution to Learning:**

Learning Objective(s) Targeted by this Assignment:

- Discuss the goals of cost benefit analysis, cost effectiveness analysis, and cost utility analysis.
- Identify the welfare implications of recently enacted or currently proposed policies

Group memberships will be decided by the instructor during the fourth week of class. You will have until the end of week eleven to complete this assignment (an individual component due in week three and a group component due in week eight). You will also have a chance to discuss your group work during the virtual live office hour in week six.

Working in groups, write a section of an article on comparative effectiveness research. This is a group writing assignment. Final assignment submissions must be a SINGLE, cohesive section.

Grading Rubrics:

**Available in Pulse under Course Resources in the folder Grading Rubrics.**

Roles and Responsibilities:

John Smith

- Draft combined bullet point list
- Approve edited final draft list edited by Jane Jones
- Produce second draft of article section
- Edit second draft of article section; produce final draft

Jane Jones

- Edit combined bullet point list; produce final draft of bullet point list
- Produce first draft of article section
- Edit second draft of article section
- Approve edited final draft article edited by John Smith

Schedule:

Date	Action	Communication	Person responsible	Outcome
2/6/2012	Assigned to group	Email	Instructor	Pairing for group project
2/8/2012	Discussion of group charter	Phone	JS, JJ	Group charter draft
2/15/2012	Agreement on final group charter	Email	JS, JJ	Group charter final

2/15/2012	Submission of final group charter	Blackboard	JS, JJ	Group charter submission
2/21/2012	Draft combined bullet point list	Email	JS	Draft bullet list
2/23/2012	Edit combined bullet point list; produce final draft of bullet point list	Email	JJ	Final draft bullet list
2/27/2012	Agreement on edited final draft list edited by Jane Jones	Email	JS, JJ	Final bullet list
3/4/2012	Submit group bullet point list	Blackboard	JS, JJ	Bullet list submission
3/12/2012	Produce first draft of article section	Email	JJ	First draft article section
3/17/2012	Produce second draft of article section	Email	JS	Second draft article section
3/20/2012	Edit second draft	Email	JJ	Third draft

	of article section			article section
3/21/2012	Edit second draft of article section; produce final draft	Email	JS	Final draft article section
3/24/2012	Agreement on final draft article edited by John Smith	Phone, email	JS, JJ	Final article section
3/25/2012	Submit group article section	Blackboard	JS, JJ	Group article section submission

Group decision on submitting the article to Wikipedia: **No**

Special Considerations, if Any

Jane Jones and John Smith will use the Wikipedia assignment discussion board as needed.

Project Initiation Sign-Off:

*Group bullet point assignment file*

**Name of Assignment:** Expand Wikipedia stub with a focus on supplier-induced demand—group bullet point

**Learning Objective(s) Targeted by this Assignment:**

1. Critique the credentialing of healthcare professionals.
2. Identify the welfare implications of recently enacted or currently proposed policies
3. Identify over-utilized and underutilized medical services

<b>1.</b>	<b>Type of Assignment:</b>	Group writing assignment
<b>2.</b>	<b>Grading Method and Point Value:</b>	20 points
<b>3.</b>	<b>Instructions (What to do and How to do it):</b>	1. Combine individual lists in pairs, removing redundant items and adding items as needed to create a list of at least 8 items 2. Collect references justifying your bullet points
<b>4.</b>	<b>Required Resources (lab equipment, software, etc.):</b>	MS Word Web browser
<b>5.</b>	<b>How to complete and</b>	1. Each individual should submit a copy of their group bullet

	<b>submit:</b>	list as a word document by Sunday, 11:59PM
<b>6.</b>	<b>File naming convention, if applicable:</b>	1. Group bullet list  Wiki_bullet_group_lastname_firstinitial_yyyy_mm_dd (for example, Wiki_bullet_group_lieberthal_r_2010_10_05)
<b>7.</b>	<b>File format, if applicable:</b>	.doc (Individual and group bullet lists, group article section)
<b>8.</b>	<b>Due date/time:</b>	Week 8, Sunday, 11:59PM (June 17, 2012)
<b>9.</b>	<b>Additional guidance, if any:</b>	For a related article with many headings, see  <a href="http://en.wikipedia.org/wiki/Patient_safety">http://en.wikipedia.org/wiki/Patient_safety</a>  A rubric is available in the course resources section

*Group bullet point assignment rubric*

**Wikipedia stub grading rubric—bullet points**

This rubric is designed for use with the Wikipedia stub activity. This activity involves adding to an incomplete article on Wikipedia. This rubric applies to the group bullet point assignment.

<b>Criteria</b>	<b>Nonperformance (0 points)</b>	<b>Basic (5-10 points)</b>
<b>Group bullet point list</b>	Subject: Health economics <ul style="list-style-type: none"><li>• See <u><a href="#">Economics of Health and Healthcare</a></u></li></ul>	Subject: Medicare <ul style="list-style-type: none"><li>• Passed in 1965 (see <u><a href="#">Economics of Health and Healthcare</a></u>)</li><li>• Covers seniors (<a href="http://www.cms.gov/MedicareGenInfo/">http://www.cms.gov/MedicareGenInfo/</a>)</li><li>• Part of Center for Medicare and Medicaid Services</li><li>• Health insurance</li><li>• Frequent reforms</li><li>• Covers some under 65s</li><li>• May undercompensate physicians</li></ul>
Covers facts and possible areas for discussion with references	Fewer than eight bullet points completed. Bullet points do not relate to the subject matter.	Fewer than eight bullet points completed. Points only cover simple facts about the subject. Incomplete references.



<b>Proficient</b> <b>(11-18 points)</b>	<b>Distinguished</b> <b>(18-20 points)</b>
<p>Subject: Medicare</p> <ul style="list-style-type: none"> <li>• Passed in 1965 (see <u>Economics of Health and Healthcare</u>)</li> <li>• Covers seniors (<a href="http://www.cms.gov/MedicareGenInfo/">http://www.cms.gov/MedicareGenInfo/</a>)</li> <li>• Part of Center for Medicare and Medicaid Services (<a href="http://www.cms.gov/home/medicare.asp">http://www.cms.gov/home/medicare.asp</a>)</li> <li>• Health insurance</li> <li>• Frequent reforms (<a href="http://en.wikipedia.org/wiki/Medicare_(United_States)#Legislation_and_reform">http://en.wikipedia.org/wiki/Medicare_(United_States)#Legislation_and_reform</a>)</li> <li>• Covers some under 65s (<a href="http://www.cms.gov/MedicareGenInfo/">http://www.cms.gov/MedicareGenInfo/</a>)</li> <li>• May undercompensate physicians (<a href="http://www.gao.gov/new.items/d0560.pdf">http://www.gao.gov/new.items/d0560.pdf</a>)</li> </ul>	<p>Subject: Medicare Modernization Act</p> <ul style="list-style-type: none"> <li>• Passed in 1965 (see <u>Economics of Health and Healthcare</u>, Ch. 21)</li> <li>• Covers seniors (<a href="http://www.cms.gov/MedicareGenInfo/">http://www.cms.gov/MedicareGenInfo/</a>)</li> <li>• Part of Center for Medicare and Medicaid Services (<a href="http://www.cms.gov/home/medicare.asp">http://www.cms.gov/home/medicare.asp</a>)</li> <li>• Passed in 2003 (<a href="http://en.wikipedia.org/wiki/Medicare_Prescription_Drug_Improvement_and_Modernization_Act">http://en.wikipedia.org/wiki/Medicare_Prescription_Drug_Improvement_and_Modernization_Act</a>)</li> <li>• Expands Medicare to cover drugs (<a href="http://www.cms.gov/PrescriptionDrugCovGenIn/">http://www.cms.gov/PrescriptionDrugCovGenIn/</a>)</li> <li>• Enacted as Medicare Part D (<a href="http://en.wikipedia.org/wiki/Medicare_Part_D">http://en.wikipedia.org/wiki/Medicare_Part_D</a>)</li> <li>• Included “donut hole” gap in coverage (<a href="http://www.kff.org/medicare/upload/7707.pdf">http://www.kff.org/medicare/upload/7707.pdf</a>)</li> <li>• Donut hole being phased out under the PPACA (<a href="http://www.nimh.nih.gov/about/director/2011/the-economics-of-health-care-reform.shtml">http://www.nimh.nih.gov/about/director/2011/the-economics-of-health-care-reform.shtml</a>)</li> </ul>

<p>Eight bullet points completed. Points cover facts and concepts. References provided for most items.</p>	<p>Eight bullet points completed with specific subject heading. Points cover facts and concepts and include emerging issues. References included for all bullet points.</p>
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## Group bullet point example

### Wiki Bullet Group List

Subject: Supplier Induced Demand: The Economics around ACOs

#### 1. Providers of Care

Over the decades, the number of physicians filling slots in primary care programs has decreased, while the number of specialists has increased. This happens in part due to several factors: a) rising medical school debt leads potential physicians into more lucrative specialties in order to repay that debt; b) lifestyle preferences of potential physicians, who wish to have more control over their schedules; c) procedural specialties, in particular, that allow more control over schedules and greater pay off; d) decreasing reimbursement in the current fee-for-service system for primary care physicians. With a greater number of specialists (supply) and a lower number of primary care physicians, but more patients to be seen (demand), there is a strain on the system in terms of unnecessary procedures, and more cost.

Gawande, A. (2009, June 1). *The cost conundrum*. Retrieved from [http://www.newyorker.com/reporting/2009/06/01/090601fa\\_fact\\_gawande](http://www.newyorker.com/reporting/2009/06/01/090601fa_fact_gawande)

#### 2. Physician Demand

Physician demand works in conjunction with the predominance of third party payments which shelter both providers and consumers about the cost of medical care.

Wilensky, G., & Rossiter, L. (1983). The relative importance of physician-induced demand in the demand for medical care. *The Milbank Memorial Fund Quarterly: Health and Society*, 61(2), 252-277. Retrieved from <http://www.jstor.org/discover/10.2307/3349907?searchUrl=/action/doBasicSearch?filter=iid%3A10.2307%2Fi367108&Query=evans&Search.x=0&Search.y=0&wc=on&Search=yes&uid=3739864&uid=2129&uid=2134&uid=2&uid=70&uid=4&uid=3739256&sid=56167976963>

#### 3. Physician Earnings Affect Demand

Economists question whether or not doctors use their relationship with the patient for their own financial advantage by recommending and providing health services that the patient would have refused if well informed. In addition, supplier induced demand SID causes earnings to increase with total physician density (all specialties taken together), but simultaneously, decrease with increasing competition within specialties.

Folland, S., A. Goodman, et al. (2007). *The physician's practice. The economics of health and healthcare*, Pearson Prentice Hall 313-330.

Xirasagar, S., & Lin, H. (2006). Physician supply, supplier-induced demand and competition: empirical evidence from a single-payer system. *Int J Health Plann Manage*, 21(2), 117-131.

#### 4. Physician Reputation

Consumers in urban areas, where physician density is higher, have more difficulty ascertaining physician reputations and prices; physicians can take advantage of this by charging higher fees. (But this does not explain the higher utilization.)

Pauly, M., & Satterwaite, M. (1981). The pricing of primary care physician's services: a test of the role of consumer information. *The Bell Journal of Economics*, 12(2), 488-506. Retrieved from <http://www.jstor.org/discover/10.2307/3003568?uid=3739864&uid=2&uid=4&uid=3739256&sid=56167976963>

#### 5. Access to Care

Over the past few years, the introduction of the baby boomers into the health care system has put an increasing strain on access to care. Baby boomers are the generation referred to with the highest population. As these boomers age in, most become part of the Medicare system. Due to declining reimbursement from the public payers, followed by the private payers, many of the dwindling numbers of primary care physicians have reduced the number of appointment slots for Medicare patients. Thus, more patients are being seen in less appropriate and less efficient venues of care (emergency rooms).

<http://www.ama-assn.org/ama/pub/advocacy/current-topics-advocacy/access-to-care.page>

## 6. PPACA

The passage of the Patient Protection and Affordable Care Act has attempted to solve some of the challenges behind the current supplier induced demand. For example, Section 3021 of the Act calls for the development of a Center of Medicare and Medicaid Services Innovation Center (CMMI). CMMI fosters health care transformation by finding new ways to pay for and deliver care that improve care and health while lowering costs. The Center identifies, develops, supports, and evaluates innovative models of payment and care service delivery for Medicare, Medicaid and CHIP beneficiaries using an open, transparent, and competitive process. Additionally, other provisions of PPACA include establishment of additional methods designed to move the current system from volume (fee for service) to value (outcomes based payment) to include the Medicare Shared Savings Program.<sup>3</sup> Standard economic theory makes no allowance at all for the possibility that the supplier would influence the position of the demand curve.

<http://www.innovations.cms.gov/>

## 7. Patient role

The patient's role in supplier induced demand has not gone ignored by public or private stakeholders. Numerous efforts to understand the consumer and how to involve the consumer in shared decision making and taking responsibility for health that may contribute to supplier induced demand. The development of the Patient Centered Outcomes Research The Patient-Centered Outcomes Research Institute (PCORI) was created to conduct research to provide information about the best available evidence to help patients and their health care providers make more informed decisions. PCORI's research is intended to give patients a better understanding of the prevention, treatment and care options available, and the science that supports those options. PCORI was established by Congress through the 2010 Patient Protection and Affordable Care Act but is by law an independent, non-profit organization. PCORI is governed by a 21-member Board of Governors. Consumers are also sheltered from the true cost of care and thus may make risky behavior decisions.

[www.pcori.org/about](http://www.pcori.org/about)

[http://en.wikipedia.org/wiki/Moral\\_hazard](http://en.wikipedia.org/wiki/Moral_hazard)

## 8. Payment Methodology Changes

Currently, reimbursement for providers is on a fee for service basis. That is, services rendered are paid for on an individual basis. There is no limit to the number of services rendered, nor is there any expectation that payment is based on any particular outcome. In recent years however, attention has been paid to entities in the industry (payer or payer/provider collaborations) who have innovated on different ways to pay for services rendered which depend entirely on outcomes. These methods hold all parties accountable for the outcomes of the services rendered. For example, several payers are experimenting with accountable care models, which hold all parties accountable for improvements in quality and reduced costs for a population of patients. In return for improved quality and reduced costs, the entities share in the savings produced.

*Norton Healthcare: A Strong Payer Provider Partnership for the Journey to Accountable Care, The Commonwealth Fund, Case Study Series, January 2012.*

Hickson GB, Altemeier WA, Perrin JM. Physician reimbursement by salary or fee-for-service: effect on physician practice behavior in a randomized prospective study. *Pediatrics* September 1987;80(3):344-50.

## 9. Supplier Induced Demand and Economics

SID means markets are not working as economists conceptualize them.

*Economics for health policy. [Web Graphic]. Retrieved from*

<http://pubhealth.spb.ru/Econ/Hphys.pdf>

*Group article section assignment file*

**Name of Assignment:** Expand Wikipedia stub on supplier-induced demand—write an article section

**Learning Objective(s) Targeted by this Assignment:**

1. Critique the credentialing of healthcare professionals.
2. Identify the welfare implications of recently enacted or currently proposed policies
3. Identify over-utilized and underutilized medical services

<b>1.</b>	<b>Type of Assignment:</b>	Group writing assignment
<b>2.</b>	<b>Grading Method and Point Value:</b>	35 points
<b>3.</b>	<b>Instructions (What to do and How to do it):</b>	<p>1. Decide on an article section heading you would like to write about.</p> <p>2. Write your article section as a pair. The final product should be at least one paragraph and each group will submit only one document as outlined below.</p> <p>3. BONUS: If you and your partner choose, you may write your section into the SID article into Wikipedia. This is worth an additional 15 points. See submission instructions below if you choose this option.</p>

4.	<b>Required Resources</b>  (lab equipment,  software, etc.):	MS Word  Web browser  HTML editor (for the bonus credit)
5.	<b>How to complete and submit:</b>	1. Each a copy of the group article section document by Sunday, 11:59PM  2. For bonus credit, submit a screen shot of the Wikipedia article with your section in it
6.	<b>File naming convention, if applicable:</b>	1. Group article section  Wiki_section_group_lastname_firstinitial_yyyy_mm_dd (for example, Wiki_section_group_lieberthal_r_2010_10_05)  2. Optional Wikipedia page edit  Wiki_page_group_lastname_firstinitial_yyyy_mm_dd (for example, Wiki_page_group_lieberthal_r_2010_10_05)
7.	<b>File format, if applicable:</b>	.doc (Individual and group bullet lists, group article section)  .jpg (Optional group Wikipedia entry)
8.	<b>Due date/time:</b>	Week 11, Sunday, 11:59PM (July 8, 2012)
9.	<b>Additional guidance, if any:</b>	For a related article with many headings, see <a href="http://en.wikipedia.org/wiki/Patient_safety">http://en.wikipedia.org/wiki/Patient_safety</a>  To take a screen shot, see <a href="http://www.wikihow.com/Take-a-Screenshot-in-Microsoft-Windows">http://www.wikihow.com/Take-a-Screenshot-in-Microsoft-Windows</a>

		A rubric is available in the course resources section
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*Group article section assignment rubric*

Rubric for Wikipedia assignment—group article section

Task description: Write a section suitable for inclusion in the Wikipedia article about [Comparative Effectiveness Research](#). I will grade the article section on formatting and style, the inclusion of the bullet points submitted and my feedback on the bullet points portion of the assignment, and the use of references for all statements of fact.

Dimension	Full credit	Comment
Formatting (10 pts)	<ul style="list-style-type: none"><li>○ At least one paragraph</li><li>○ Double spaced</li><li>○ Contains a section heading</li><li>○ References are included as numbered footnotes<sup>1</sup></li><li>○ Links to other articles are included as <a href="#">hyperlinks</a></li></ul>	The third paragraph of the Comparative Effectiveness Research article, “An important component of CER is the concept...” is a good example. It has complete sentences, footnotes, and hyperlinks to other Wikipedia articles
Bullet points (10 pts)	<ul style="list-style-type: none"><li>○ Uses the eight bullet points from the first two assignments</li><li>○ Incorporates my comments</li><li>○ Puts the bullet points together into complete sentences</li><li>○ All bullet points are organized around the section heading</li></ul>	
References (10 pts)	<ul style="list-style-type: none"><li>○ Minimum of two footnotes</li><li>○ Minimum of two hyperlinks</li><li>○ At least one hyperlink to another Wikipedia article from the “see also” section</li></ul>	Linking to related Wikipedia articles like <a href="#">Cost-minimization analysis</a> helps to build Wikipedia
Style (5 pts)	<ul style="list-style-type: none"><li>○ Accessible for a lay audience</li><li>○ Interesting to others</li></ul>	If you can answer the question “Why would someone (other than my mother) read this?”, you did a good job.

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<sup>1</sup> Like this

Group article section example (posted to Wikipedia)

## Supplier Induced Demand(SID) in Healthcare

**1. Overview:** The [doctor-patient relationship](#) is key to the practice of healthcare and is central to the delivery of high quality efficient care while maintaining costs. Controversy surrounds the extent and existence of supplier induced demand (SID). Some believe it is ideological rather than evidence based. Validity of results from different models is reported to lack consensus, making policy difficult to develop and implement.<sup>2</sup> Normative definitions cast negative dispersions on physicians indicating they act as imperfect agents for their own self-interests. A positive perspective of SID focuses on a physician's ability to shift a patient's demand curve to the right.<sup>3</sup> Demand inducement refers to a "physician's alleged ability to shift patients' demand for medical care at a given price, that is, to convince patients to increase their use of medical care without lowering the price charged."<sup>4</sup> Economists have explored how this additional care will affect patient welfare.<sup>5</sup>

1.1 Negative definition of SID: The physician as the supplier has the home field advantage because of his/her knowledge and credentials and may appear as superior causing an imbalance within the patient relationship.

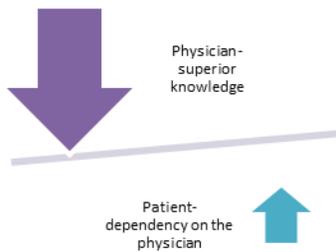
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<sup>2</sup>Labelle,R., Stoddart, G., Rice, T.,( 1994). A re-examination of the meaning and importance of supplier-induced demand. *Journal of Health Economics*, 13, 347-368. ([www.sciencedirect.com/science/article/pii/0167629694900361](http://www.sciencedirect.com/science/article/pii/0167629694900361))

<sup>3</sup>Richardson, J., Peacock, S., (1999) Supplier Induced Demand Reconsidered. *Centre For Health Program Evaluation Working Paper 81*.  
<http://www.buseco.monash.edu.au/centres/che/pubs/wp81.pdf>

<sup>4</sup><http://www.docstoc.com/docs/28362741/31-Supplier-Induced-Demand>

<sup>5</sup>Labelle,R., Stoddart, G., Rice, T.,( 1994). A re-examination of the meaning and importance of supplier-induced demand. *Journal of Health Economics*, 13, 347-368. ([www.sciencedirect.com/science/article/pii/0167629694900361](http://www.sciencedirect.com/science/article/pii/0167629694900361))



1.2 Positive definition of SID: LaBelle and colleagues developed a conceptual framework model that explores effectiveness of agency and effectiveness of services. Would the patient have demanded the service if (s)he had the same information as the agent and did the service contribute positively to the patient's health status?<sup>6</sup>

## 2. Key Principles<sup>7</sup>

2.1 Supplier Induced demand (SID): In [economics](#), may occur when asymmetry of information exists between [supplier](#) and [consumer](#). The supplier can use superior information to encourage an individual to [demand](#) a greater quantity of the good or service they supply than the [Pareto efficient](#) level, should asymmetric information not exist. The result of this is a welfare loss.

2.2 Pareto efficiency: If there is no way of improving the situation of one person, without making that of another person worse, the solution found is Pareto-efficient. By providing more of one thing to one patient would mean providing less to another patient; the resources are

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<sup>6</sup>Labelle,R., Stoddart, G., Rice, T.,( 1994). A re-examination of the meaning and importance of supplier-induced demand. *Journal of Health Economics*, 13, 347-368. ([www.sciencedirect.com/science/article/pii/0167629694900361](http://www.sciencedirect.com/science/article/pii/0167629694900361))

<sup>7</sup>Folland, S., Goodman, A.C., & Stano, M. (2013). Chapter 15: The Physician's Practice in *The Economics of Health and Health Care*. Boston: Pearson.

already being used to full capacity, so providing more of one service will take away resources from another.

2.3 Principals: Patients or principals are consumers who hire health care professionals or agents to supply a service.

2.4 Agents: Suppliers of services, in healthcare these agents are physicians. Agents provide inputs that control and direct the use of medical goods such as diagnostic tests, surgery or healthcare. When agents have more knowledge than the principal (patient), this is asymmetric information.

2.5 Violation of Agency/Supplier Inducement: Agents can violate their relationship with the principal by inducing the principal to over or underutilize consumption of services. The policy concern is that physicians may violate their agency role due to self-interests.<sup>8</sup>

2.6 [information asymmetry](#): Provides the agent with an advantage over the principal to misuse the agency relationship for their personal gain. The situation can become imbalanced and in some cases cause a [market failure](#), [adverse selection](#), [moral hazard](#), and information monopoly. Most commonly, information asymmetries are studied in the context of principal-agent problems.

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<sup>8</sup>Folland, S., Goodman, A.C., & Stano, M. (2013). Chapter 15: The Physician's Practice in *The Economics of Health and Health Care*. Boston: Pearson.

## Supplier Induced Demand

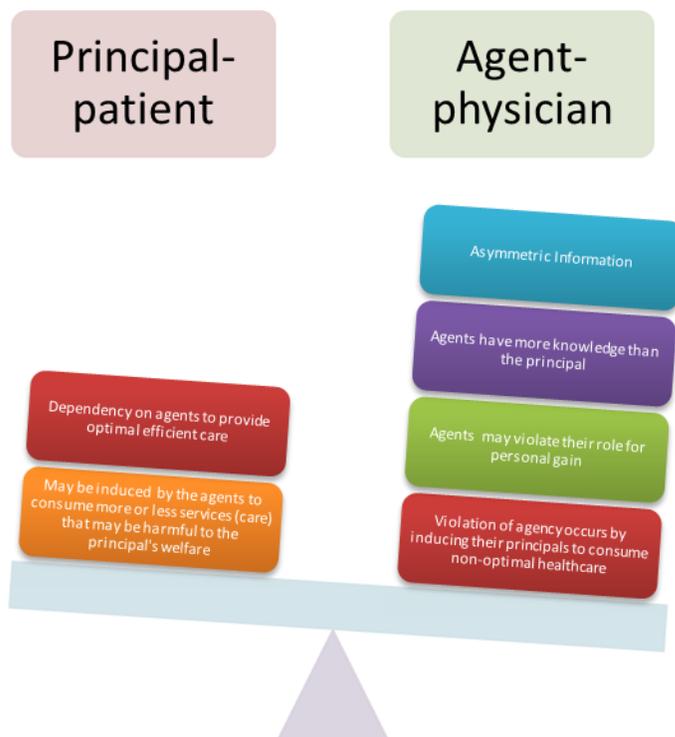


Diagram constructed by P. Bulley, based on information from Folland, S., Goodman, A.C., & Stano, M. (2013). Chapter 15: The Physician's Practice in *The Economics of Health and Health Care*. Boston: Pearson.

**3. Contributors to Variations in Care:** It is unclear the extent to which SID explains geographic variations in care. It is a complicated topic. It is difficult to know how much is done explicitly to raise a physician's income and how much is practice style or professional uncertainty. Physicians who are more entrepreneurial may be interested in maximizing income. Surgeons may have more opportunity to manipulate demand. They may be more enthusiastic about certain procedures they perform because they generate more revenue or because they value the surgical treatment.<sup>9</sup>

<sup>9</sup>The Incidental Economist Blog. <http://theincidentaleconomist.com/wordpress/agency-problems/>

3.1 The simple adage, “if you build it they will come,” applies to SID and the medical profession. It appears when resources are available, overutilization occurs even when improved quality and outcomes are uncertain. This occurs daily in hospital intensive care units, at primary care physician offices and with overutilization of expensive radiologic technology and laboratory testing.<sup>10</sup> “Research suggests that those who invest in imaging equipment order more CT and MRI tests than doctors who haven’t made the investment.”<sup>11</sup>

3.2 Analysts report that physicians reflexively respond to receiving positive test results by ordering more tests. Variation in medical practices can result in SID without producing increased quality outcomes. When standardized treatment pathways are unavailable to agents and principals a degree of uncertainty exists resulting in increased requests for unwarranted services. As a result, overutilization of supplies and services may occur without evidence of improved quality.<sup>12</sup> Wennberg reported on a review of evidence that supports the hypothesis that “variations occur to a large extent because of differences among physicians in their evaluation of patients (diagnosis) or in their belief in the value of the procedures for meeting patient needs (therapy).”<sup>13</sup> He and colleagues called this the *professional uncertainty hypothesis*. Decision aids for both principals, such as the use of evidence-based standards and guidelines,

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<sup>10</sup> Mulley, A. G. Inconvenient truths about supplier induced demand and unwarranted variation in medical practice. *BMJ* 2009; 339: b4073.

[http://www.bmj.com/content/339/bmj.b4073?ikey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype2=tf\\_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20\\_2/b4073](http://www.bmj.com/content/339/bmj.b4073?ikey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype2=tf_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20_2/b4073)

<sup>11</sup> Consumer Reports, June 2012 <http://www.consumerreports.org/cro/ChoosingWisely.htm>

<sup>12</sup> Mulley, A. G. Inconvenient truths about supplier induced demand and unwarranted variation in medical practice. *BMJ* 2009; 339: b4073. [http://www.bmj.com/content/339/bmj.b4073?ikey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype2=tf\\_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20\\_2/b4073](http://www.bmj.com/content/339/bmj.b4073?ikey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype2=tf_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20_2/b4073)

<sup>13</sup> Wennberg, J.E., Barnes, B.A., Zubkoff, M., Professional Uncertainty and the Problem of Supplier Induced Demand. *Soc.Sci.Med* Vol16, 811-824. [http://lingli.ccer.edu.cn/ahe2011/papers/3/Wennberg%20et%20al.\(1982\).pdf](http://lingli.ccer.edu.cn/ahe2011/papers/3/Wennberg%20et%20al.(1982).pdf)

will assist in reducing uncertainty, help change physician practice and provide focus on improving patient- centered care.<sup>14</sup>

McPherson and colleagues noted regional variations in tonsillectomies and other surgical procedures in the United States.<sup>15</sup> Obstetricians who recommend C-sections as a standard of care for delivering babies may be using their power and authority over pregnant women and their partners as a revenue generator to reach or maintain their *target income*.<sup>16 17</sup> Jonathan Gruber and Maria Owings looked at the relationship between physician financial incentives and cesarean section delivery by examining declining fertility rates in the United States.<sup>18</sup>

The growing trend of “boutique” or “concierge” primary care physicians who advertise “more personal care” can be viewed as an example of SID. Concierge medicine ([http://en.wikipedia.org/wiki/Concierge\\_medicine](http://en.wikipedia.org/wiki/Concierge_medicine)) is based on an annual fee paid by the consumer. Proponents believe this model will increase the quality of care delivered to those

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<sup>14</sup> Mulley, A. G. Inconvenient truths about supplier induced demand and unwarranted variation in medical practice. *BMJ* 2009; 339: b4073.

[http://www.bmj.com/content/339/bmj.b4073?ijkey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype=tf\\_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20\\_2/b4073](http://www.bmj.com/content/339/bmj.b4073?ijkey=a4f28a534c57e12f615e44ce917bc8b03cc554c4&keytype=tf_ipsecsha&linkType=FULL&journalCode=bmj&resid=339/oct20_2/b4073)

<sup>15</sup> McPherson, K., Wennberg, J.E., Hovind, Clifford P. Small –area variations in the use of common surgical procedures: an international comparison of New England, England, Norway. *N Engl J Med* 1982;307:1310-4. <http://www.nejm.org/doi/full/10.1056/NEJM198211183072104>

<sup>16</sup> Folland, S., Goodman, A.C., & Stano, M. (2013). Chapter 15: The Physician’s Practice in *The Economics of Health and Health Care* (pp. 310). Boston: Pearson.

<sup>17</sup> Sakala, Carol. Medically unnecessary cesarean section births: Introduction to a symposium. *Social Science & Medicine*, Volume 37, Issue 10, Pages 1177-1198. (abstract only - <http://www.sciencedirect.com/science/article/pii/027795369390331W>)

<sup>18</sup> Gruber, J., Owings, M. Physician financial incentives and cesarean section delivery (abstract only) *The RAND Journal of Economics*. Vol. 27, No. 1 (Spring, 1996), pp. 99-123.

<http://www.jstor.org/discover/10.2307/2555794?uid=3739808&uid=2&uid=4&uid=3739256&sid=56258561323>

individuals who subscribe to it. Opponents argue it creates a two tier system, with better care for those who can afford it.<sup>19 20 21</sup>

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<sup>19</sup> Folland, S., Goodman, A.C., & Stano, M. (2013). Chapter 15: The Physician's Practice in *The Economics of Health and Health Care* (pp.305-311). Boston: Pearson.

<sup>20</sup> Zuger, Abigail. For a Retainer, Lavish Care by 'Boutique Doctors' *New York Times*, October 30, 2005.  
<http://www.nytimes.com/2005/10/30/health/30patient.html?pagewanted=1>

<sup>21</sup> Chen, Pauline W. Can Concierge Medicine for the Few Benefit the Many? *New York Times*, August 26, 2010.  
[http://www.nytimes.com/2010/08/26/health/26pauline-chen.html?\\_r=1](http://www.nytimes.com/2010/08/26/health/26pauline-chen.html?_r=1)

*Wikipedia extra credit assignment*

Wikipedia stub assignment: Posting a section to Wikipedia.org

1. What to do and how to do it: You may write your section from the Wikipedia stub into the relevant page on <http://en.wikipedia.org/>.
2. Grading method and point value: 15 points. See rubric under course resources for the Wikipedia stub group article section under Course Resources.
3. How to complete and submit: You and your partner should post your article section to the Wikipedia article. If your article section already exists, modify it by adding the content you have created. Then, take a screenshot of the updated page on Wikipedia.org.
4. File naming convention, if applicable: Name the file  
Wiki\_wikipedia\_group\_lastname\_firstinitial\_yyyy\_mm\_dd (for example,  
Wiki\_section\_wikipedia\_lieberthal\_r\_2010\_10\_05)
5. File format or other special requirements, if applicable: GIF, JPG or PDF
6. DUE: Sunday at midnight.
7. Additional guidance: You can find information on taking a screenshot at <http://graphicssoft.about.com/cs/general/ht/winscreenshot.htm>.