

Being Brief: one person's approach

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“I apologize for the length of this letter.
There was not time to compose a
shorter one.”

- Attributed (by me) to Thomas Jefferson, but actually (my wife tells me), its Blaise Pascal.

New NIH Format: Suggested Page Allocations

- Specific Aims (1 page)
- Research Strategy (12 pages)
 - Significance (~2 p)
 - Innovation (~1 p)
 - Approach (includes Preliminary Studies/Progress Report) (~9 p)
- K-awards: 1+12 p for **Candidate Background, Career Devel Plan, and Research Strategy**
- For R03s, R21s: 1+6 p

Initial Thoughts

- This is a big, new thing.
- It will be difficult to succeed by using the same approach as before and then just cutting by 50%.
- The successful applicants will adopt a new approach to an integrated proposal, focusing on the underlying ideas and the approaches to addressing them.

Implications of shorter proposals

1. Use all components of the proposal to their maximum potential (e.g. biosketches, Human subjects, resources, budget justification).
2. Clear thinking and writing will be rewarded.
3. Simple compelling ideas will be rewarded.
4. Excellent figures and tables become more important.
5. Cutting and pasting from other proposals is a very bad idea.

Implications of shorter proposals:

- Biosketch
- Budget and budget justification
- Human subjects
- Resources

Biosketch (Yours)

- Biosketches are the major source of data for reviewers to score the “Investigators” criterion.
- Still four pages
- Suggested limit to publications is 15, (based on recency, importance to the field, and/or the relevance to the application).
- Personal statement: description of your abilities and experiences as they relate to the project is key:
 - Try to be brief (10-15 lines)
 - Be specific, with specific examples. You can refer to the 15 publications
- Think through what you are proposing, and address those competencies in the personal statement (e.g. directing a team, performing a specific analysis, etc)

Biosketches (Your co-investigators)

- As PI, you should be much more motivated to edit/improve their biosketches than they are.
- Get their most recent biosketches and their complete CVs.
- Revise the biosketches. For example, the biosketch you have from Dr. X is from a recent grant where she was PI. In this grant she is a Senior Advisor. The Personal statement should mention her experience as successful senior advisor/mentor.
- If you can get your co-investigators to do this, that's great. But it is ultimately your responsibility.
- Make sure details in various biosketches do not contradict each other (e.g. other support)
- What previously may have gone at beginning of "C. Preliminary Data" under (for example) "C.1. Investigative team's prior experience relevant to XXXX" now can go to biosketch.

Budget and budget justification

- Spend some time thinking about why the various individuals are included in the proposal. What do they really do? Drop those with no compelling role.
- In budget justification, be as comprehensive and specific about each person's role — what expertise they bring.
- Be specific: a \$20,000 request for supplies may easily be cut. A \$20,000 request itemized into four or five categories probably will not.
- Even with Modular Budgets, justify the expenses. You can do this under “Additional Narrative Justification.”

Human Subjects

- A surprisingly high number of reviewers comment negatively on the Human Subjects sections, which may color the rest of their review. Words like "boiler plate" are often used.
- The best way to write a good Human Subjects section is to write it de novo. Do not copy and paste from other proposals and try to modify to fit.
- You can dump the entire process of selecting patients, inclusion and exclusion criteria, etc, in this section, but if you do, be very concise and specific.
- Read the directions: "Supplemental Instructions for Preparing the Human Subjects Section of the Research Plan"

Facilities and Resources

- New requirement is a description of how the scientific environment will contribute to the probability of success of the project, unique features of the environment, and, for Early Stage Investigators, the institutional investment in the success of the investigator (e.g. resources, classes, etc).
- Implications:
 - Everyone should have a Facilities and Resources section
 - Copying and pasting is a bad idea

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Clear thinking and writing: classical art as a model

Classic (*adj*):

- Relating to the art, literature, and culture of the Ancient Greeks and Romans.
- Having a style that is balanced, formal, objective, restrained, regular, simple.

(Webster's New World Dictionary)









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Outlines

1. The secret of good writing is good thinking.
2. The primary benefit of an outline is to assist in achieving clarity in thinking; that is, the outline helps you think better.
3. This is why making a good outline is often very, very difficult and is worth all the effort devoted to it.
4. You can construct an outline at any stage in the writing process. Earlier is better, but later is better than never.

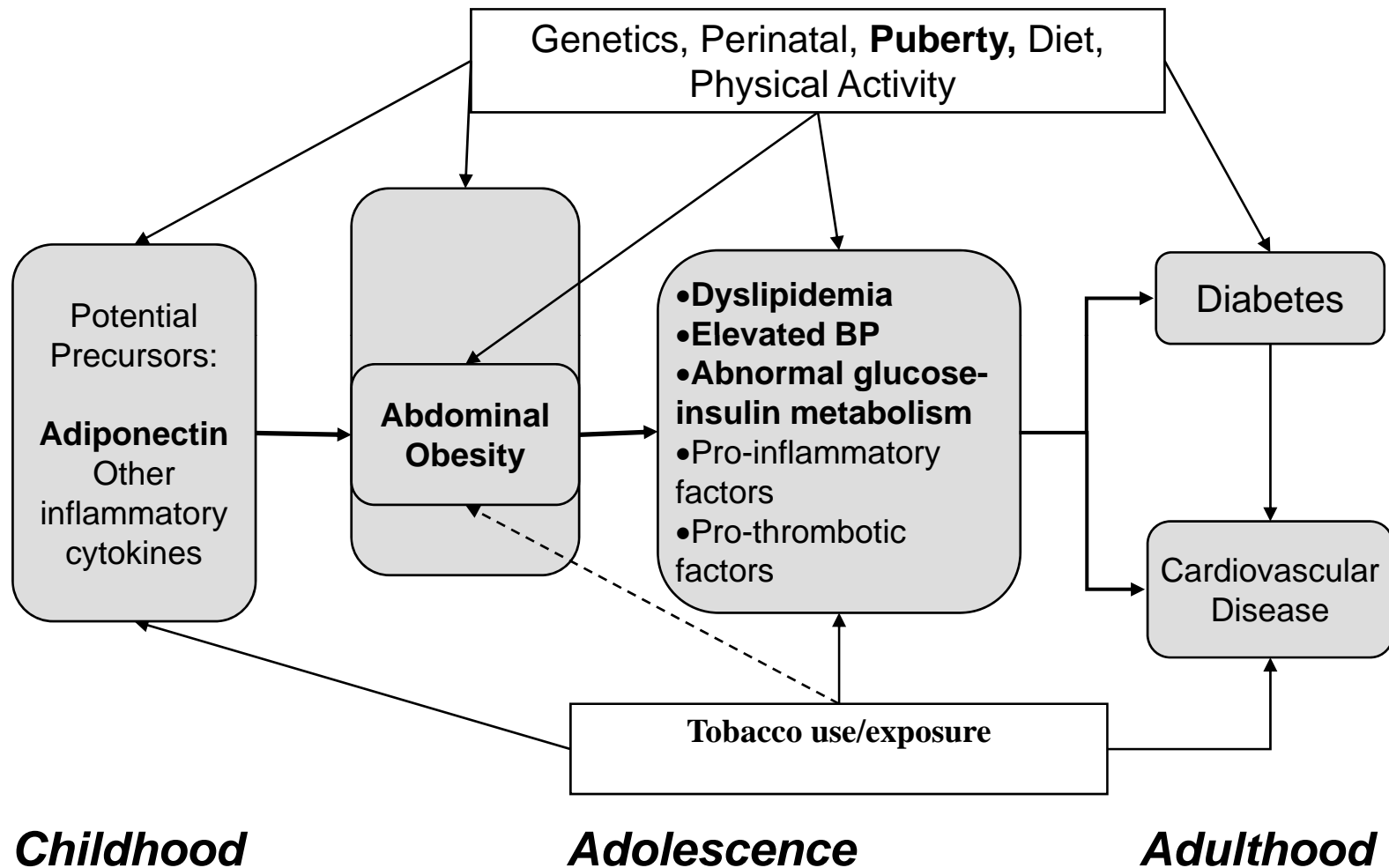
Practice communicating the big picture

- Work to achieve the 30,000 ft perspective
 - Practice your “Big Picture” skills
 - Develop your elevator speech
 - Tell it to your Mom
- Craft a 30,000 ft and a 5,000 ft summary statement and refer to these as you write
- Practice focusing on:
 - design > methods
 - approach > techniques
- Create the context (big picture) carefully, add details only as needed for clarification (e.g. as examples)

Some ways to achieve brevity

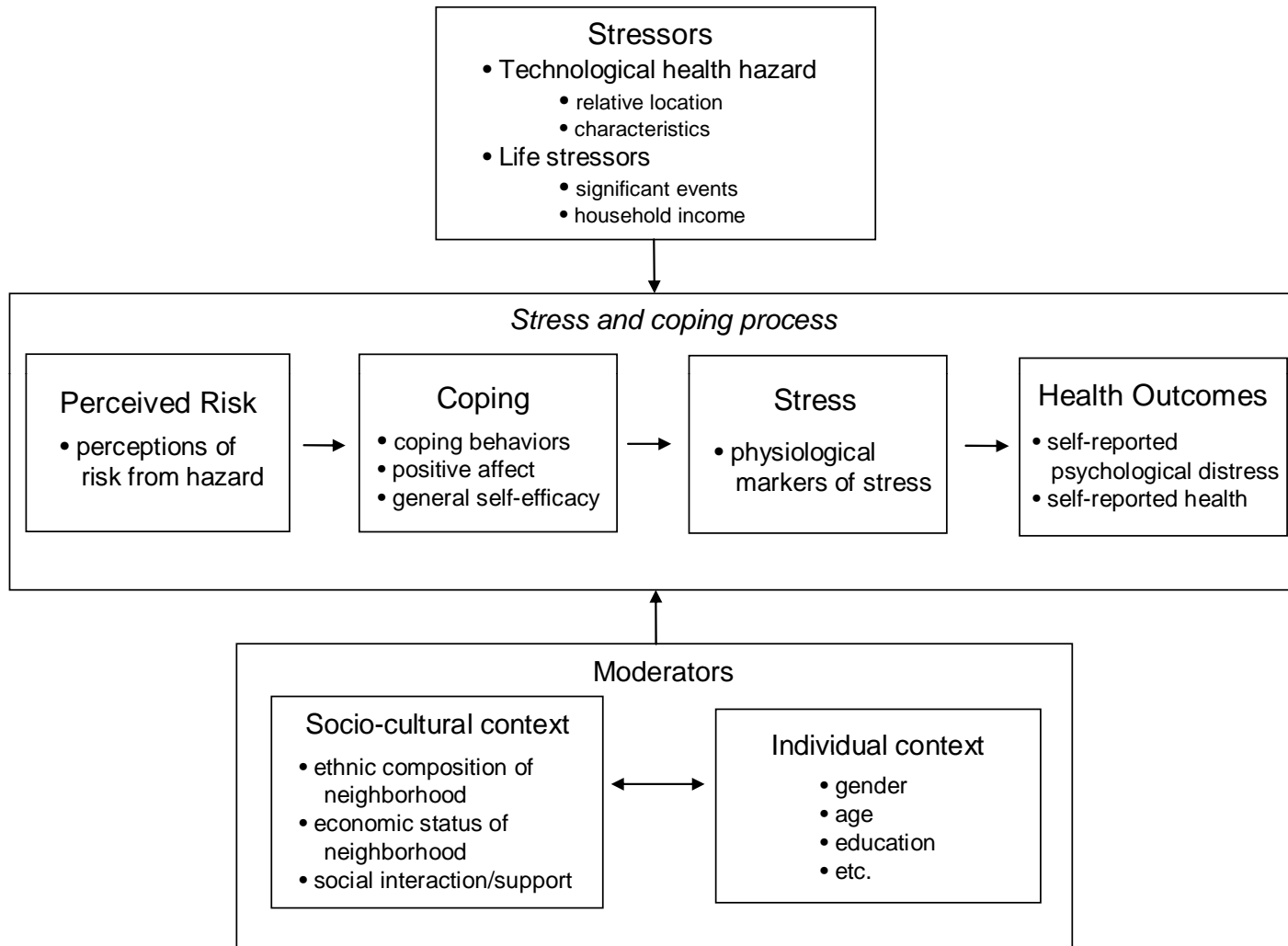
- Write to an informed, interested reader
- Say everything once, in full
- Label every paragraph, with a heading or topic sentence
- Do not cut and paste. Write everything, de novo to specifically address your proposal
- Use very well thought-through figures and tables that communicate competence — that you're all over this stuff

Proposed Metabolic Syndrome Factors in the Life Course from Obesity to Cardiovascular Disease



Bold = factors included in this study

Figure 2. Framework for the Study of Environmental Risk, Coping, and Hispanic Health



Structural Model Explaining Health Outcomes

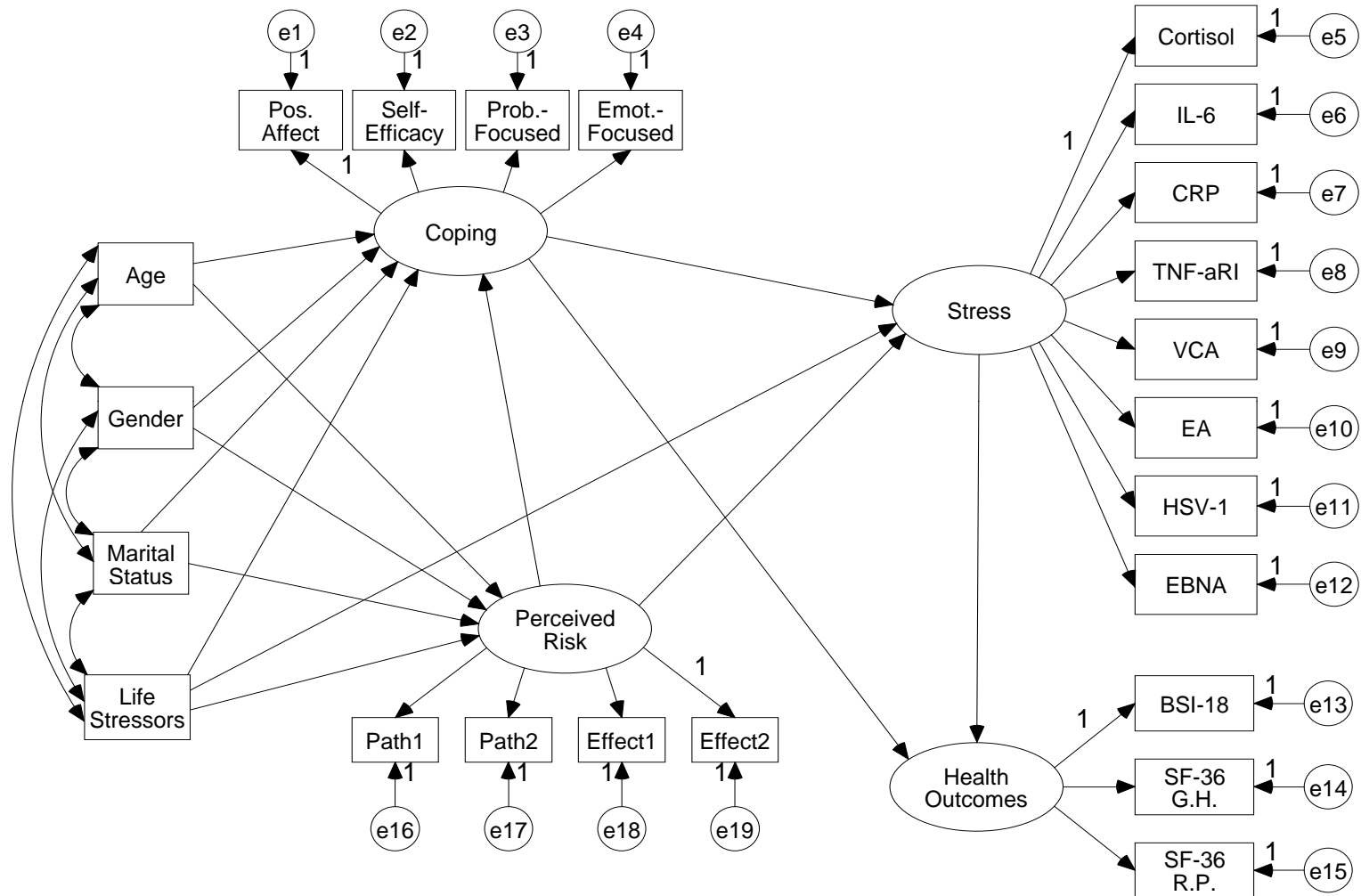


Figure 1.1 The trajectory of cancer care, listing components of the trajectory and aspects of medical care that might affect those components.

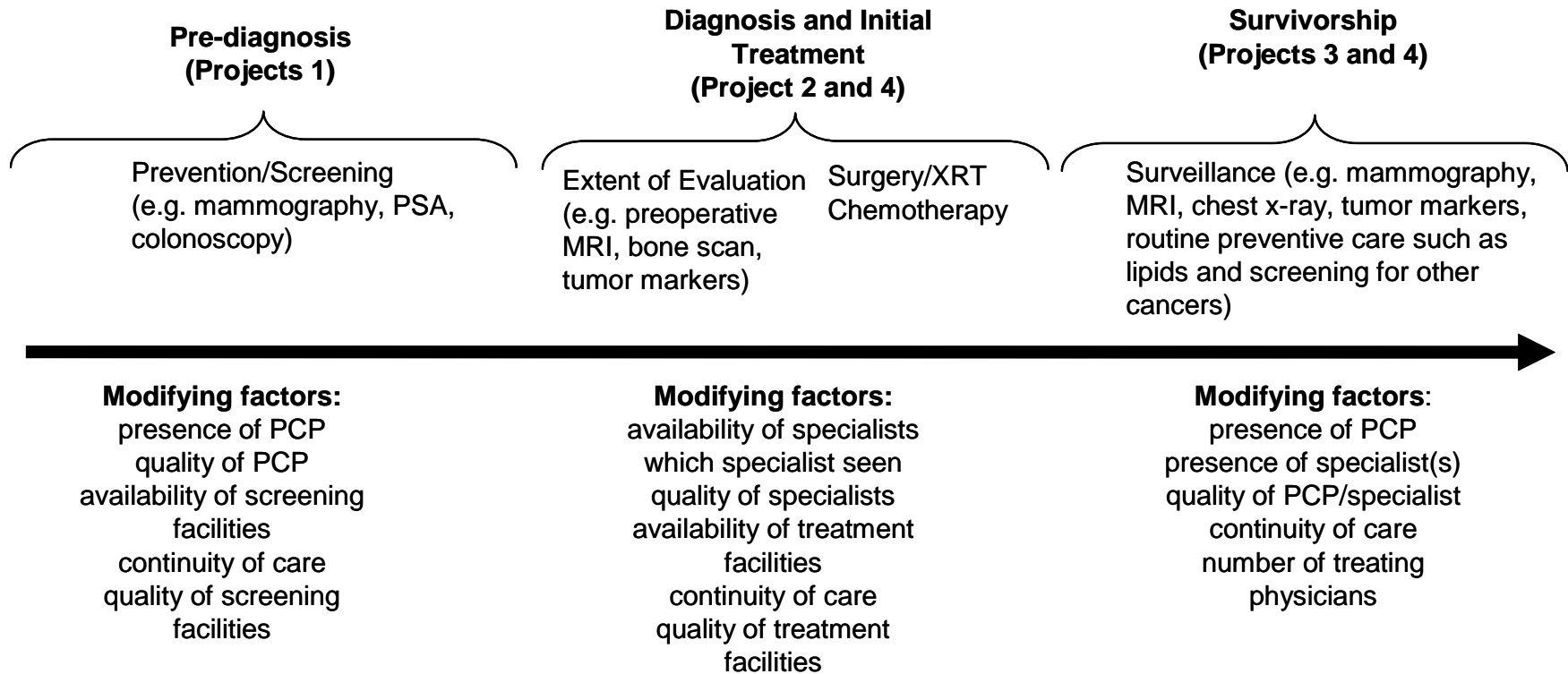


Table Definitions of Quality Indicators

Variable	Source	Definition (ICD9 Diagnosis Code)	Use
Antiemetic drug 5ht3 &NK1 receptor antagonists	INS;MCR Part D	Injectable: J1626,J 2405, J2469, J1453, Oral: J8501; Q0166, Q1279, Q0180; S0091; S0181; S0174; NDC codes for antiemetics obtained from www.fda.gov/Drugs	Quality indicator – emesis prevention
Granulocyte growth factor (filgrastim, pegfilgrastim, sargramostim)	INS	J1440; J1441; J2505; J2820	Quality indicator – infection prevention
Bone mineral density test (DEXA Scan)	INS	CPT/HCPCCS 76075 prior to 1/1/2007 77080 after 1/1/2007	Quality indicator – bone health
Cardiac test (Echo, MUGA)	INS	CPT/HCPCS 93303, 93304, 93307, 93308, 93320, 93321, 93325; 78472-78478, 78483	Quality indicator - cardiac health
Hospice enrollment date	INS	Mo/day/yr of first hospice claim	Quality indicator end of life
Last chemotherapy date	INS	Mo/day/yr last chemo claim before death	Quality indicator end of life

Writing an NIH grant

The Old Way – filling a series of pots:

- The Specific Aims pot
- The Background pot
- The Preliminary data pot
- The Methods pot (subjects, measurements, data analysis, power calculation, timeline — all in mini pots)

The New Ideal – creating an organic whole, identifying an important scientific issue and the approach that you will take in tackling it.