A NEW APPROACH TO P30 CANCER CENTER SUPPORT GRANT FUNDING

Report of the National Cancer Advisory Board Ad Hoc Cancer Centers Working Group

February 27, 2014

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## National Cancer Advisory Board Cancer Centers Working Group

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NCAB Charge to the Cancer Centers Ad Hoc Working Group (WG)

• Assess whether current funding guidelines for NCI-designated Cancer Centers ("Centers") are appropriate and sufficient
  • if not, what aspects might be changed?

• Provide appropriate guidance on policies and metrics relevant to allocation of funds to Centers in a time of fiscal stringency
2013 Guideline Amendments

- CCSG awards ≥$6 million capped at current direct costs
- CCSG awards of <$6 million can request increase of 10% or $1,000,000, whichever is greater
- New centers can request awards ≤$1 million
Background

- The Cancer Centers Program is the envy of the world.
- In few if any other countries is there same commitment to excellence in multi-disciplinary cancer research and promotion of translational science that reduces cancer burden.
- Now funded >forty years, brings enormous benefits to health of Americans.
- Centers are a major platform for advancing national priorities in cancer research
  - investigators in centers hold majority of extramural NCI funding
- Rigorous review standards make designation meaningful and prestigious
  - imprimatur that leverages other sources of support
- CCSG award provides essential support for infrastructure spanning spectrum of cancer research.
Overall Goal

• To consider funding policies for NCI-designated Cancer Centers, and if appropriate, recommend changes.
The Problem

- NCI leadership and Board recognized need to examine complex historical funding patterns that influenced current P30 Cancer Center Support Grant (CCSG) awards
  - assess potential disparities and consider whether alternative approaches should be explored
Questions from Dr. Varmus to WG

• Are the 2012 interim funding guidelines appropriate and sufficient to counter concerns about current distribution?

• Should we
  • change the ‘cap’?
  • launch new centers with larger or smaller budgets?
  • change allowable rate of increase?

• Are there better methods for making funding decisions?
  • if so, what metrics should be used and how much consideration should be given to ways in which core funds are used?

• Are there ways to make budgeting more flexible, without increasing base budget?
  • through supplements or cooperative agreements?
  • appropriate use of these alternative resources?
Methods

- WG included ten members from diverse cancer centers and from private sector
- Met six times over one year, heard presentations from NCI leadership, and reviewed historical and current funding policies and approaches
- Drew several major conclusions
- Discussed multiple possible approaches, including various funding models
- Aligned on recommendations
Conclusions

• Significant disparities exist in size of CCSG awards, often due to factors other than merit
  • Longevity, size of NCI budget and competitors in year of application, prior performance

• Interim funding approach in 2012 CCSG Guidelines manages award expectations and retains a flat budget
  • but perpetuates disparities

• Centers differ in type, organizational structure, and environmental factors that affect importance of specific CCSG components

• Centers should be evaluated on what they do and how well they do it
  • impact of science emerging from the center and how that was enabled by CCSG should be paramount

• Components of CCSG process could be optimized to decrease administrative burden, increase flexible use of funds, and stress most significant science

• Underperforming Centers should be carefully reviewed; cessation of funding should be considered
Added Complexity – Supply and Demand

• NCI funding has decreased and may remain flat or decrease further in coming years
• There is continuing interest from universities in attaining NCI-designation for their cancer center
• NCI must be responsive to imperatives to support geographically distributed centers and accessibility for underserved populations
• CCSG awards are rarely terminated
• As a result, number of centers continues to grow and budget continues to be stretched.
We Reached Consensus

- The Working Group then discussed approaches to address disparities in funding.
- After review of several example models, a consensus emerged on the following recommendations:
Recommendations

1. CCSG funding should be comprised of three components
   - base award
   - multipliers of the base predicated on merit and size
   - possible supplement
2. Center Administrators should be involved in planning for implementation of new approach
3. Proposed changes should be framed in context of NCI and Centers’ mission.
   - timeline and mode of communicating changes will help determine acceptability
RECOMMENDATION 1: CCSG FUNDING SHOULD BE COMPRISED OF THREE COMPONENTS: A BASE AWARD; MULTIPLIERS OF THE BASE, PREDICATED ON MERIT AND SIZE; AND A POSSIBLE SUPPLEMENT.
Recommendation #1

- **Base award**
  - should vary by Center type (basic, clinical, comprehensive), based on CCSG requirements (50%\(^1\).)
  - at renewal, a predetermined base award applicable to all Centers of same type should be starting point.

- **Merit funding**
  - calculated on a linear scale as a percent multiplier of base award, using impact score (30%\(^1\).)
    - Impact scores of low merit may result in reduction of the base award

- **Size**
  - calculated as a percent multiplier of base award, using figure for total peer-reviewed funding reported by the center (15%\(^1\).)

- **[Supplements]**
  - based on review of proposed highly innovative and impactful programs, cores, new initiatives, and consistency with NCI priorities (5%\(^1\).)

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\(^1\) Refers to direct cost budget of the Centers Program; not individual CCSG grant award.
Comparison: FY13 DCs for Centers (grey) to Example Model (50-30-15) DCs for Centers (red)

Direct costs (in millions)

R² = 0.3508

R² = 0.8194

Merit

FY13 DCs awarded  Model 1  Linear (FY13 DCs awarded)  Linear (Model 1)
Understanding the “Splits”

• 50-30-15 split (leaving aside the 5% ) refers to how Centers Program divides up their total dollars in direct cost budget for CCSG Awards
  
  • e.g., if $160 M available for direct costs, allotments would be:
    • $80M to cover base awards
    • $48m to cover merit component
    • $24 M to cover size/complexity component
Understanding the Individual Awards

- Individual CCSG awards won’t necessarily have same proportions

- Distribution in individual awards will vary based on center type, performance, size, etc.
  - e.g., a large (Category 4) Comprehensive Cancer Center with impact score 10 might receive $4.2M
    - pre-determined base award of $1.2M (29%)
    - merit award of $2.4 M (57%)
    - size/complexity award of $600K (14%)

- Base will generally be a smaller proportion of the award, as center gets better and bigger.
RECOMMENDATION 2: CANCER CENTER ADMINISTRATORS SHOULD BE INVOLVED IN THE PLANNING FOR IMPLEMENTATION OF THE NEW APPROACH.
Recommendation #2

• Within their centers, administrators will need to evaluate, prepare for, and communicate potential changes, particularly where there are reductions.

• Will need to communicate with NCI Centers program staff on implications of funding changes, positive or negative.
RECOMMENDATION 3: PROPOSED CHANGES SHOULD BE FRAMED IN THE CONTEXT OF THE NCI AND CENTERS MISSION. THE TIMELINE AND MODE OF COMMUNICATING CHANGES WILL DETERMINE THEIR ACCEPTABILITY
Recommendation #3

• Timeline and mode of communicating changes will help determine their acceptability
• Centers should be given the opportunity for input on implementation plans
Anticipated Results

• Addresses problem of accretion since each renewal will re-compete for a predetermined base award applicable to all centers of the same type
  • Mitigates problem of historical inequities
• Negates need for caps, since playing field will be leveled by formula-based budgeting
<table>
<thead>
<tr>
<th>Some Potential Problems</th>
<th>Mitigations</th>
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<tbody>
<tr>
<td>Does not fully address variations in size of NCI budget in a given year of grant renewal</td>
<td>Should help minimize variations over time, and establish greater fairness</td>
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<td>May create administrative and fiscal hardships for centers and parent institutions; especially for matrix Centers</td>
<td>Determine potential impact through Center Administrators and recommend potential phase-ins, e.g., slow phase vs. a one-time tap or graduated tax, or an annual adjustment to awards. Additional budget modeling will be conducted by NCI and by individual centers based on hypothetical outcomes</td>
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<td>Does not address whether this type of funding will result in the overall good for cancer research and ultimately for cancer patients</td>
<td>Careful monitoring of the impact of over time</td>
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<td>May generate alarm among Centers and their constituents, particularly in initial implementation phase</td>
<td>Involve Center Administrators, Directors and advocates in implementation and communication plans</td>
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Summary

• Exceptional work by members of WG to gain alignment on the problems and consensus on recommendations
• Recommendations make significant improvements to current state
• Methods of communication will help determine acceptability
• Highlights importance of transparency, fairness, input, and “fine-tuning”
• Frame within mission of NCI and national cancer program, not a reaction to difficult budget times or redistribution for political purposes.
• Emphasize remarkable success of the Cancer Centers program, its overall importance and impact, and that these changes are designed to enhance this national treasure.
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| Director |  |
| University of Chicago Comprehensive Cancer Center |  |
Potential Problems

• Does not fully address variations of size of NCI budget in a given year of grant renewal
  • but should help minimize impact over time
• May create administrative and fiscal hardships for centers and parent institutions
  • particularly for large matrix-type Centers,
• Does not address whether this type of funding will result in the overall good for cancer research and ultimately for cancer patients
Comparison: FY13 DCs for Centers (grey) to Example Model (33-33-33) DCs for centers (red)
## Hypothetical Funding Calculation Using Base Award + Multipliers for Merit and Size (for Example Purposes Only, All Figures in Direct Costs)

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<th>Center Type</th>
<th>Basic (7)</th>
<th>Clinical (20)</th>
<th>Comprehensive (41)</th>
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<tbody>
<tr>
<td><strong>Base Award</strong></td>
<td>$850,000</td>
<td>$1,050,000</td>
<td>$1,250,000</td>
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<tr>
<td><strong>Maximum Merit Award</strong></td>
<td>$1,844,500</td>
<td>$2,278,500</td>
<td>$2,712,500</td>
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<tr>
<td>(percent multiplier of base award, declines linearly with increasing impact score)</td>
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<tr>
<td><strong>Maximum Size Award</strong></td>
<td>$782,000</td>
<td>$966,000</td>
<td>$1,050,000</td>
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<td>(percent multiplier of base award, using quintile of peer-reviewed funding)</td>
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<tr>
<td><strong>Maximum possible award</strong></td>
<td>$3,476,500</td>
<td>$4,294,500</td>
<td>$5,012,500</td>
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