

III BPC Workshop



BOAS PRÁTICAS CLÍNICAS EM
CARDIOLOGIA

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Translating Quality Improvement into Research

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I have no relationships with industry.

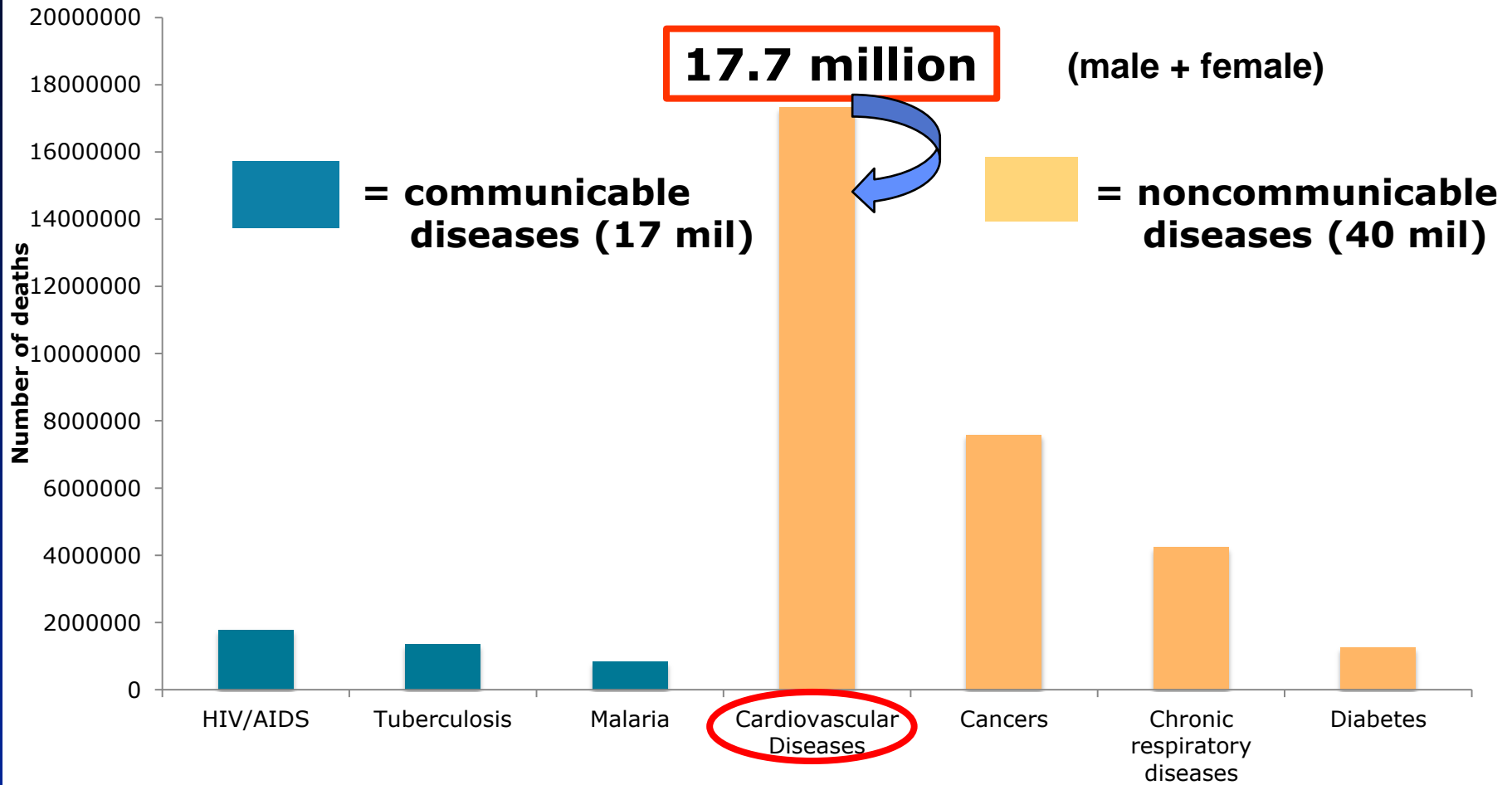


BOAS PRÁTICAS CLÍNICAS EM
CARDIOLOGIA

*Um projeto em colaboração da SBC, PROADI-
SUS/HCor e American Heart Association®*

So why are we doing this?

57 Million Global Deaths by Cause

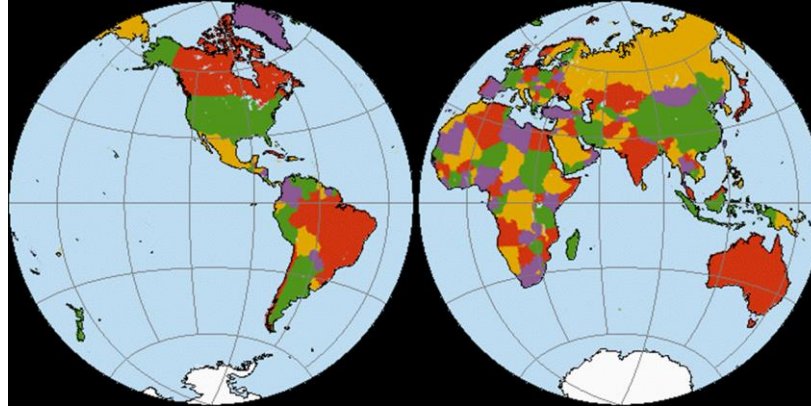


57 million global deaths in 2015:

- 70% from NCDs
- 44% of NCD deaths due to CVD
- 31% of all global deaths

Data from WHO

According to the World Health Organization:



- ♥ **Noncommunicable diseases (NCDs) are the main cause of mortality worldwide.**
- ♥ **NCDs account for about 2/3 of all deaths in the world -- 40 million people in 2015. In Brazil, NCDs are responsible for 74% of deaths.**
- ♥ **About 1/2 of all NCD deaths globally are due to cardiovascular disease (including heart disease and stroke).**

Get With The Guidelines (GWTG):

Focus on Quality

THE MORE HEALTHCARE QUALITY IMPROVES,
THE MORE PATIENT OUTCOMES DO TOO

See how Target: Stroke is making a difference

1 2 3 4

When medical professionals apply the most up-to-date evidence-based treatment guidelines, **patient outcomes improve.**



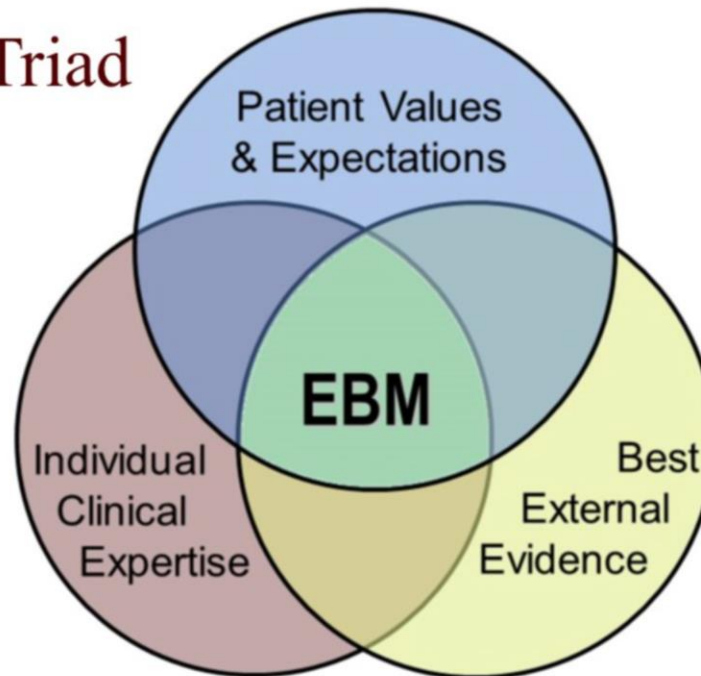
That's the simple truth behind the drive for continuous quality improvement. Our comprehensive suite of programs can help you advance farther and faster in the quest for ever-better care.

Evidence-Based Medicine

Evidence-based medicine is a systematic approach to clinical problem solving which allows the **integration** of the **best available research evidence** with **clinical expertise** and **patient values**.

(Sackett DL et al. Evidence-based medicine: how to practice and teach EBM. London: Churchill-Livingstone,2000)

The EBM Triad



How Scientific Is Modern Medicine Really? (2011)



By Dana Ullman

Doctors today commonly assert that they practice “scientific medicine,” and patients think that the medical treatments they receive are “scientifically proven.” However, this ideal is a dream, not reality, and a clever and profitable marketing ruse, not fact.

The British Medical Journal’s “Clinical Evidence” analyzed common medical treatments to evaluate which are supported by sufficient reliable evidence (BMJ, 2007). They reviewed approximately 2,500 treatments and found:

- 13 percent were found to be beneficial
- 23 percent were likely to be beneficial
- Eight percent were as likely to be harmful as beneficial
- Six percent were unlikely to be beneficial
- Four percent were likely to be harmful or ineffective.

- 46 percent were unknown whether they were efficacious or harmful

In the late 1970s, the US government conducted a similar evaluation and found a strikingly similar result. They found that only 10 percent to 20 percent of medical treatment had evidence of efficacy (Office of Technology Assessment, 1978).



Arch Intern Med. 2004 Jan 26;164(2):203-9.

Get with the guidelines for cardiovascular secondary prevention pilot results.

LaBresh KA, Ellrodt AG, Gliklich R, Liljestrang J, Peto R.

BACKGROUND:

The use of Web-based technology and a collaborative model to improve hospital adherence to secondary prevention guidelines has not been previously evaluated.

METHODS:

Twenty-four hospitals in Massachusetts participated in a collaborative that met quarterly, with didactic and best-practice presentations and interactive multidisciplinary team workshops... A customized tool kit and interactive, Web-based management tool were used for data collection and on-line feedback. Data from 1738 patients admitted with coronary artery disease were collected...

RESULTS:

Clinically and statistically significant increases from baseline to 10- to 12-month follow-up were demonstrated in...

CONCLUSION:

Implementation of a collaborative quality improvement initiative, interactive training of hospital teams with physician champions, and the use of an interactive Web-based Patient Management Tool enhanced adherence to prevention guidelines in hospitalized patients with coronary artery disease.

Recent Program Publications Still Support Effectiveness of GWTG

GWTG Stroke

Song S et al. **Association of Get With The Guidelines-Stroke Program Participation and Clinical Outcomes for Medicare Beneficiaries With Ischemic Stroke.** *Stroke*. (Epub 4/14/16)

- **Better patient outcome linked to Get With The Guidelines-Stroke**

GWTG Heart Failure

Patel D et al. **Guideline-Appropriate Care and In-Hospital Outcomes in Patients With Heart Failure in Teaching and Nonteaching Hospitals: Findings From Get With The Guidelines-Heart Failure.** *Circulation: Cardiovascular Quality and Outcomes* [Epub 10/25/16]

- **Participation in AHA program GWTG improved treatment guideline adherence**

GWTG RESUS

Chan P et al. **Resuscitation Practices Associated With Survival After In-Hospital Cardiac Arrest-A Nationwide Survey.** *JAMA Cardiology*. May 2016

- **3 resuscitation practices were associated with significantly higher survival rates for in-hospital cardiac arrest**

To a large extent, we know what
treatments/interventions do or do not work, but
what about...



When Evidence Says No, but Doctors Say Yes (Or Evidence Says Yes but Doctors Say No)

Long after research contradicts common medical practices, patients continue to demand them and physicians continue to deliver. The result is an epidemic of unnecessary and unhelpful treatments.

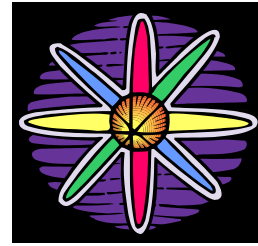
1,800 Studies Later, Scientists Conclude Homeopathy Doesn't Work

A major Australian study debunks homeopathy—again



**Did we really
need to do
1,800 studies?**

Emerging Knowledge



Scientific publications



Human studies



Clinical trials



Practice guidelines

Performance measures



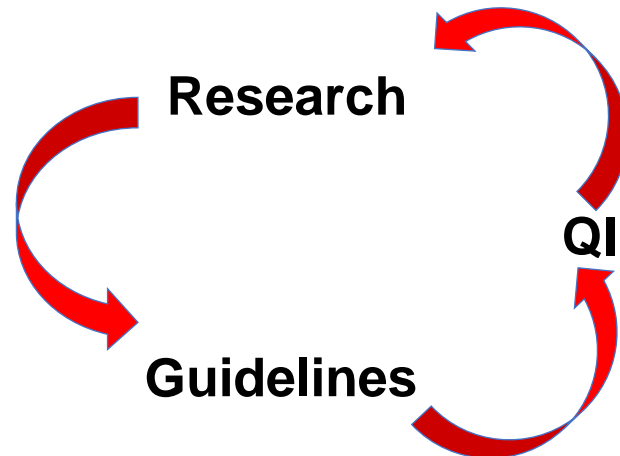
GWTG / BPC



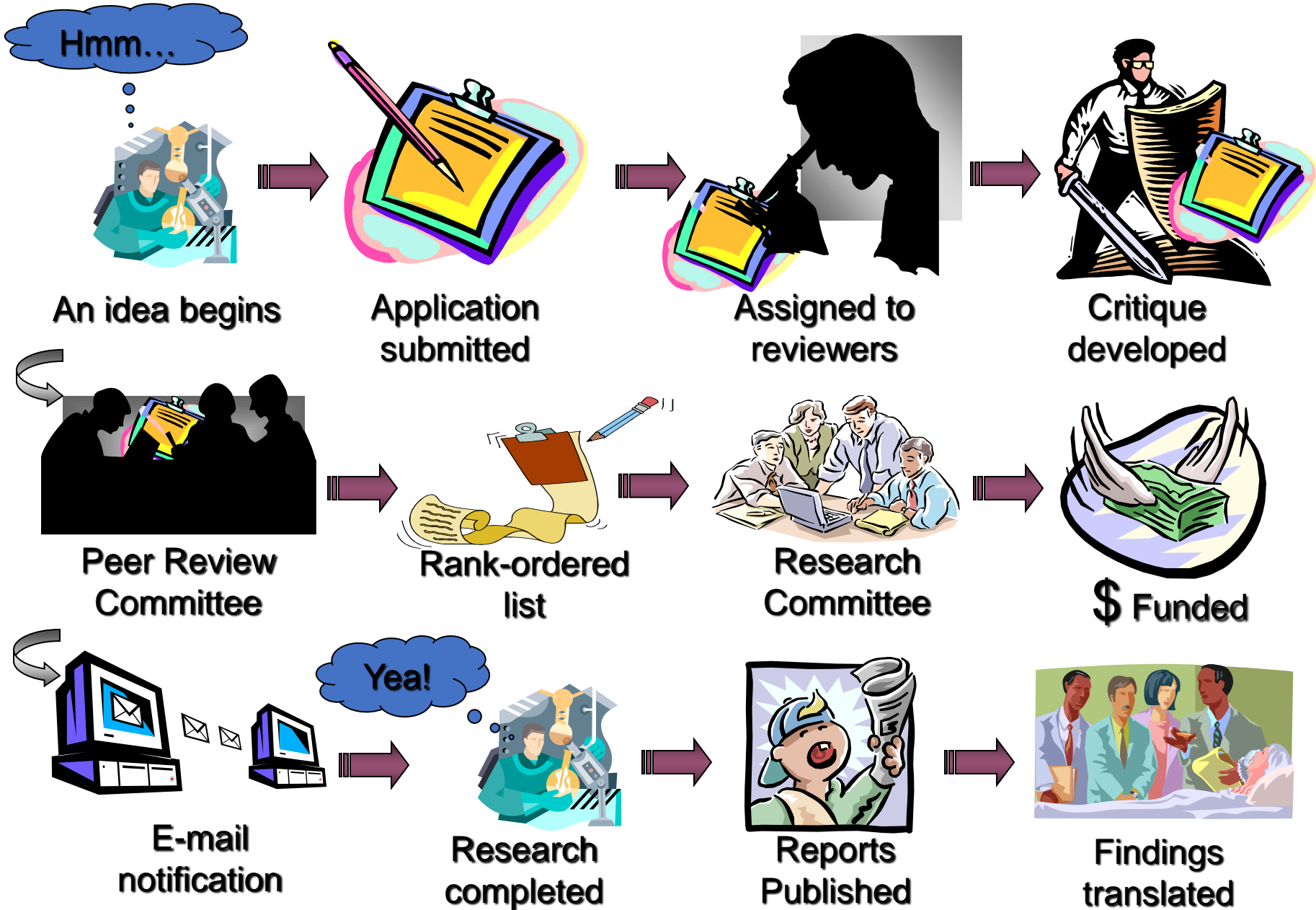
**The title of my talk today is
“Translating Quality Improvement
into Research”**

-- OR --

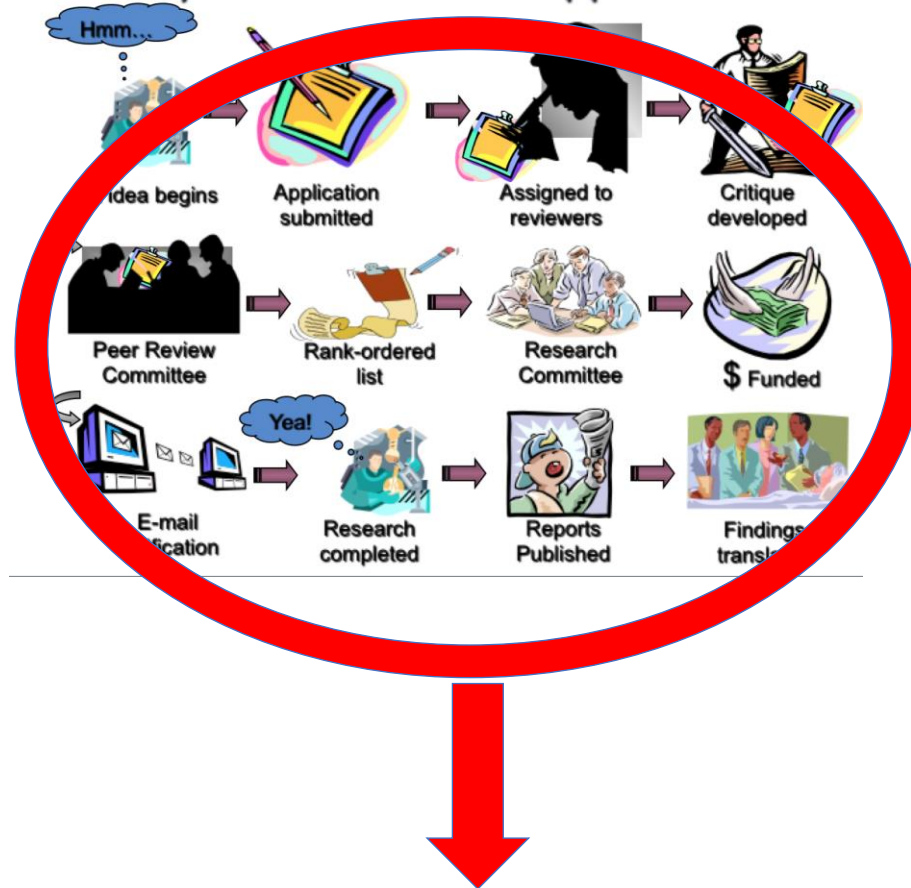
**Should have it been titled
“Translating Research into Quality
Improvement”**



Life Cycle of a Research Application



Life Cycle of a Research Application



It will not be this difficult to be able to answer research questions using the BPC database!

Your Hospital Has Impact!

Each hospital in the BPC network has input into the ever-growing data base



Quality Research Publications

470
Research
Publications
Program Wide

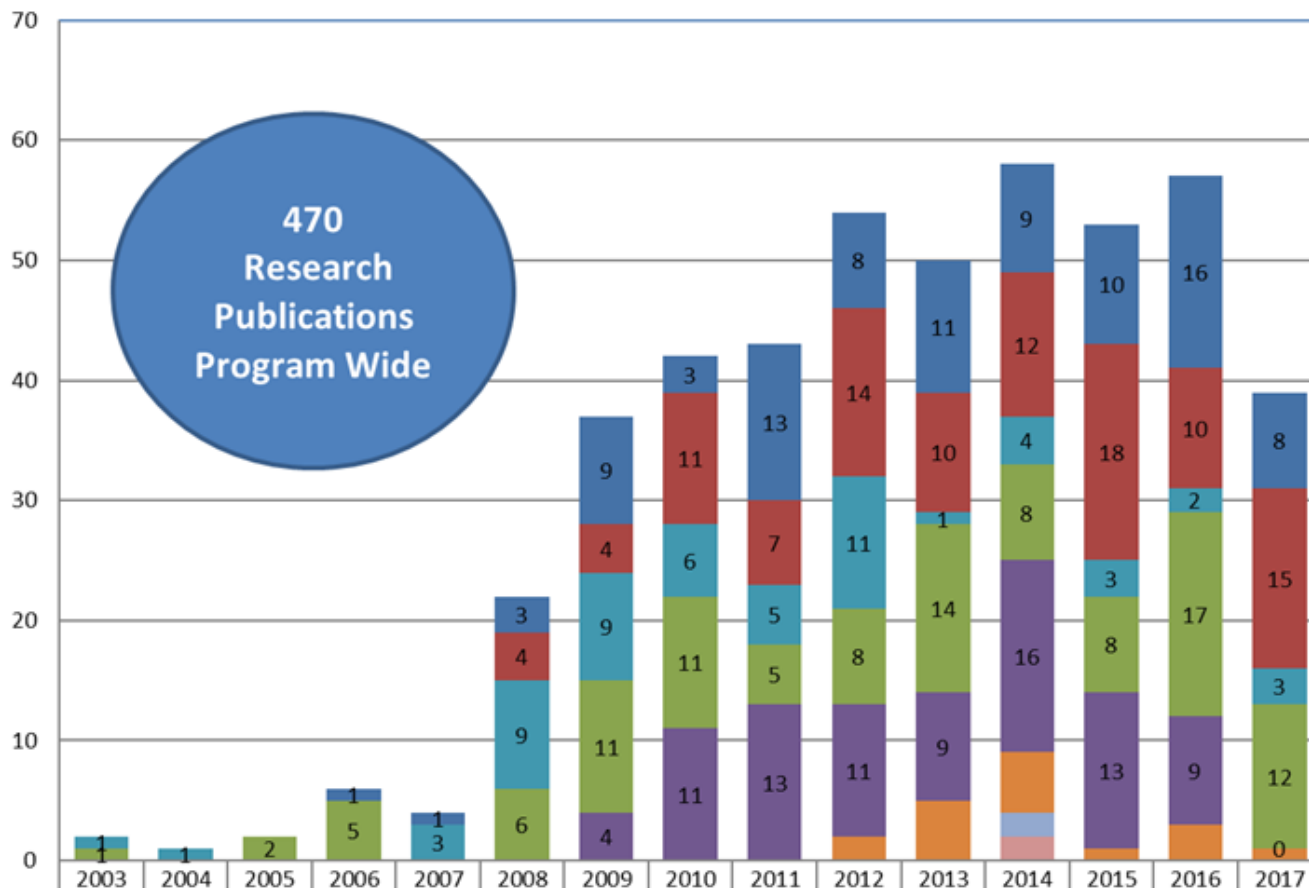
Years through 10/30/17

Total Pubs by Program :

- *GWTG HF: 92
- *GWTG Stroke: 105
- *GWTG CAD: 57
- *GWTG Resuscitation: 108
- *Action-Registry GWTG: 86
- *Mission: Lifeline: 17
- *TGA: 2
- *GWTG AFib: 2

Note: "Due to the transition over to ACTION Registry-GWTG, GWTG - CAD closed effective December 31, 2009 with final data entry completed on March 31, 2010"

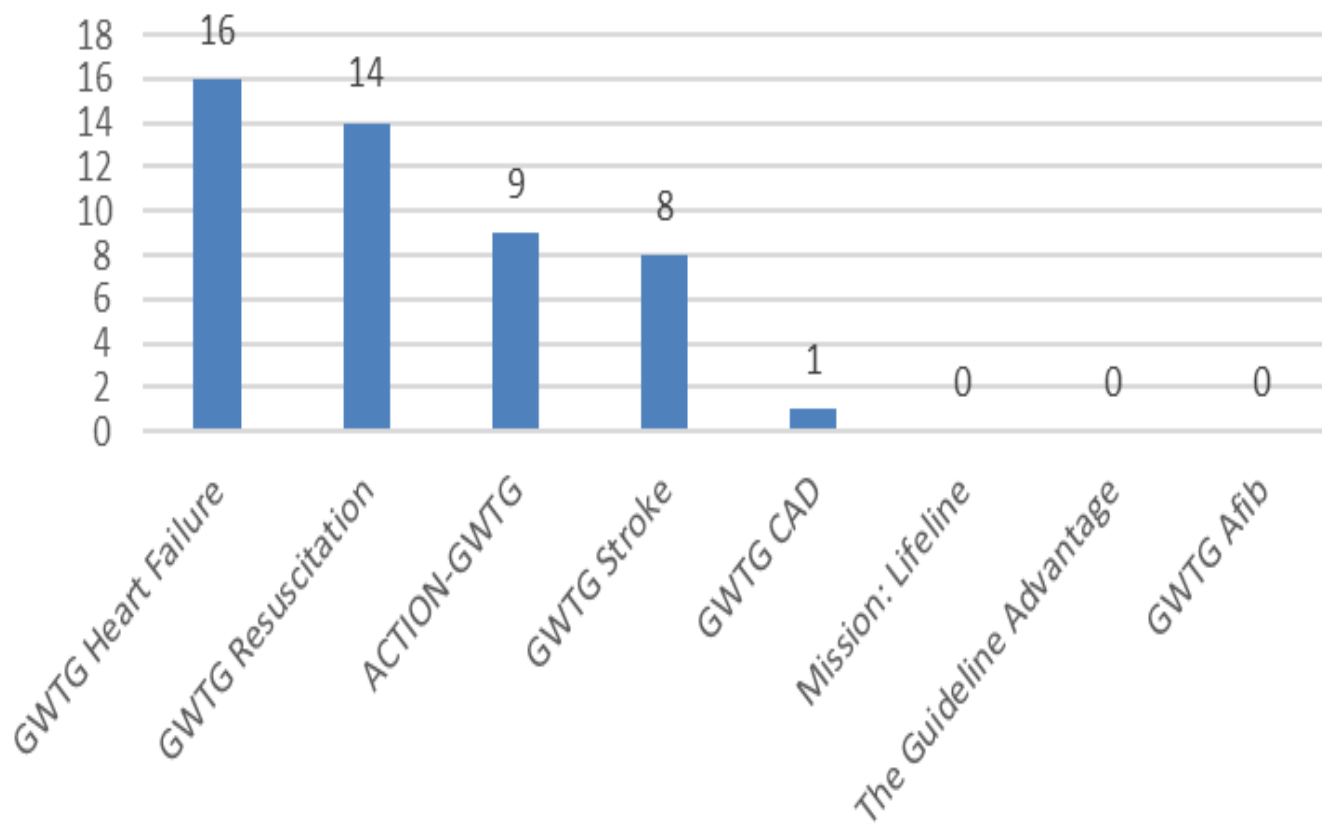
*Pubs for more than module are counted in both module
*Pubs counted in year they went online or print



■ GWTG Heart Failure				1	1	3	9	3	13	8	11	9	10	16	8
■ GWTG Stroke						4	4	11	7	14	10	12	18	10	15
■ GWTG CAD	1	1			3	9	9	6	5	11	1	4	3	2	3
■ GWTG Resuscitation	1		2	5		6	11	11	5	8	14	8	8	17	12
■ ACTION-GWTG							4	11	13	11	9	16	13	9	0
■ Mission: Lifeline										2	5	5	1	3	1
■ The Guideline Advantage											0	2	0	0	0
■ GWTG Afib											0	2	0	0	0

48 Quality Research Publications in 2016

Quality Programs Research Publications 2016



EXAMPLE: High Impact Journal Publications 2016

GWTG Stroke

Kim J, Fonarow G, Smith EE, Reeves M, Navalkele D, Grotta J, Grau-Sepulveda M, Hernandez A, Peterson E, Schwamm L, Saver J. [Treatment with TPA in the "Golden Hour" and the Shape of the 4.5 Hour Time-Benefit Curve in the National US Get With The Guidelines-Stroke Population.](#) *Circ.* (Epub 11/4/16)

GWTG Heart Failure

Kelly J, Hammill B, Doll J, Felker GM, Heidenreich P, Bhatt D, Yancy C, Fonarow G, Hernandez A. [The Potential Impact of Expanding Cardiac Rehabilitation in Heart Failure](#) (Research Letter). *JACC.* [Epub 8/22/16]

Hess P, Hernandez A, Bhatt D, Hellkamp A, Yancy C, Schwamm L, Peterson E, Schulte P, Fonarow G, Al-Khatib S. [Sex and Race/Ethnicity Differences in Implantable Cardioverter-Defibrillator Counseling and Use Among Patients Hospitalized With Heart Failure: Findings from the Get With The Guidelines-Heart Failure Program.](#) *Circ.* [Epub 8/4/16]

EXAMPLE: Using the database to focus on gender differences

Up to 4 of 5 hospitalized patients with heart failure, eligible for ICD counseling did not receive it, particularly women and minority patients. [Circulation](#).

Women were less likely than men to receive optimal care at hospital discharge when admitted for coronary artery disease, and more likely to die within 3 years. [Circ Cardiovasc Qual Outcomes](#).

Compared to men, women with ischemic stroke were older and more likely to arrive to the hospital by ambulance, have lower quality of care and were less likely to be discharged home. [Stroke](#).

1 in 10 people with a heart attack are younger than 45 years and quality of care was significantly lower and mortality was higher in women versus men. [Am J Med](#).

Women received nearly equal care as men at hospitals participating in GWTG-HF. [Circ Heart Failure](#).

Women with STEMI had higher adjusted mortality rates than men and the underuse of evidence-based treatments and delayed reperfusion among women represent potential opportunities. [Circulation](#)

Less than 40 percent of potentially eligible patients hospitalized for heart failure received Implantable Cardioverter-Defibrillator (ICD) therapy, and rates of use were lower among eligible women than among white men, [JAMA](#)

IN SUMMARY,

There is much you can learn from the data your hospitals are collecting.

Use it as a tool to answer research questions about your patient population.

It can provide important information about patient disease states, care and treatment.





Thank you!
Obrigado!!



Acknowledgement of Program Support



Pfizer IGLC has provided funding support for the BPC Project