Results-based financing: an overview of the research

Health System Strengthening: Role of conditional cash incentives

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Disclosure (& disclaimer)

- I am an employee of the Norwegian government.
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Professional good intentions and plausible theories are insufficient for selecting policies and practices for protecting, promoting and restoring health.

Iain Chalmers

Humility and uncertainty are preconditions for unbiased assessments of the effects of the prescriptions and proscriptions of policy makers and practitioners for other people.

Iain Chalmers

We will serve the public more responsibly and ethically when research designed to reduce the likelihood that we will be misled by bias and the play of chance has become an expected element of professional and policy making practice, not an optional add-on.

Iain Chalmers

"Both politically, in terms of being accountable to those who fund the system, and also ethically, in terms of making sure that you make the best use possible of available resources, evaluation is absolutely critical."

Dr Julio Frenk, Minister of Health, Mexico

"If you are poor, actually you need more evidence before you invest, rather than if you are rich."

Results-based financing (RBF)

Health Results Innovation Grant (HRIG) proposal 24 October 2007

- What's good about the HRIG proposal?
- What is RBF?
- Why RBF?
- How should RBF be evaluated?
- Is RBF the right focus?

What's good about the HRIG proposal?

- Focus on MDG 4 & 5 (MCH)
- Focus on achieving results
- Impact evaluation
  - 7% of budget
  - Focus on experimental designs
- Consideration of scaling up
- Technical support
- Development of a set of guidance tools

What is results-based financing?

- RBF - results-based financing = P4P - pay for performance = Performance-based funding = Output based aid
- “the transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target” (CGD P4P Working Group)
- “the provision of payment for the attainment of well-defined results” (WB)
  - “RBF promises to be **a useful tool** within the larger national health strategy complementing more traditional health financing structures.”
  - “Linking payment to results **requires robust monitoring and evaluation, which is integral to the implementation of RBF**.”
  - “an RBF **approach for obtaining MDG 4 and 5 results**”

The definition of RBF is fuzzy

- RBF is complex
- It is not clear whether RBF refers to financial incentives or to a package
- The scope of RBF is not clear

RBF is a simple concept, but a complex intervention

- Level at which the incentives are targeted
  - recipients of healthcare, individual providers of healthcare, healthcare facilities, private sector organisations, public sector organisations, sub-national governments (municipalities or provinces), national governments, or multiple levels
- Targeted results
  - health outcomes, delivery of effective interventions (e.g. immunisation), utilisation of services (e.g. prenatal visits or birth at an accredited facility), quality of care, provision of facilities, human resources or supplies, or development goals (e.g. building institutional capacity)
- Indicators used to measure results
  - what is measured, how it is measured and who measures it, including the use of independent assessments and monitoring
- Choice of targets
  - who sets the targets (the provider of the incentives, the recipient of the incentives, or both) and the type of target (pay per result (e.g. per immunisation) or pay only if a target is achieved (e.g. 90% coverage)

RBF is a simple but complex concept

- Type and magnitude of the incentive
  - the amount of cash, vouchers, or material goods provided for achieving results and the frequency of transfers
- Proportion of financing that is paid for based on results
  - and how the rest of the financing is allocated, including the proportion of the payer's financing based on results, the proportion of the total financing based on results, and how flexible the financing is
- Ancillary components of RBF schemes, such as
  - increasing the availability of resources
  - education, supplies, technical support or training
  - monitoring and feedback; other quality improvement strategies
  - increasing salaries
  - construction of new facilities
  - improvements in planning and management or information systems
  - changes in governance (e.g. decentralisation)
  - priority setting and rationing (e.g. establishment of essential drug lists or services covered by insurance)
  - processes to involve stakeholders

RBF versus RBFS

- Does RBF refer to the use of **financial incentives** (conditionalilty) or to a **package** (of which financial incentives may be a small part)?
- To the extent that it is the latter, RBFS risks the same problem from being mislabelled as the DOTS strategy (of which DOT is a small part with uncertain benefits).

Components of RBF included in the HRIG proposal

- Health results innovation **grant**
- **IDA credit** (predictable funding to strengthen health systems)
  - Percentage mix IDA and RBF varying by country
- **Technical support**
  - "bottlenecks to deliver health services"
  - how to structure RBF
  - establishment of health information systems
  - continual review and assurance of 'mid-course' corrections
  - costing of intervention package
  - financial systems
  - how to design contracts
  - Assessment of fiscal implications of scaling up and sustaining RBF
- Contracting framework
- Independent performance auditors
- "disbursement of Grant funds by the Bank to the government would be linked to proof of agreed results"

What's in and what's out?

- "Results will be defined as coverage of services or some output measure"
- The scope of RBF is not clear. For example,
  - Is reduction or removal of user fees or paying transportation costs RBF?
  - Are incentives to reduce absenteeism RBF?

Why RBF?

The Global Campaign for the Health Millennium Development Goals

"the evidence suggests that small financial incentives targeted at the right level . . . are enough to change behaviour significantly and achieve results."

The Global Campaign for the Health Millennium Development Goals. Oslo: Prime Ministers Office, 2007.

Why RBF?

- RBF "allows for regular review of successes, shortfalls, and bottlenecks
  - thereby enabling adjustments to implementation of national health plan
- "RBF appears to be a very useful tool to promote equity
  - because it can target incentives to improve the quantity or quality of services or encourage demand from specific populations or income groups"
- "RBF has the potential to expand opportunities for involving the non-state sector,"
- "to improve **incentives** and **accountability** in both the public and private sectors"

The rationale for RBF is fuzzy

- Regular review of successes, shortfalls, and bottlenecks
  - Not unique to RBF
- A very useful tool to promote equity
  - Can increase inequities
  - Lots of other tools
- Expand opportunities for involving the non-state sector
  - There are other options besides RBF
- To improve **incentives** and **accountability**

What is the mechanism?

Conditional financial incentives

⇩

Motivation and accountability

⇩

Changes in behaviour

⇩

Reductions in mortality
(or other health goals)

Assumptions

Conditional financial incentives

- Motivation and accountability
  - Depends on size of the incentive and
  - Other motivations
- Changes in behaviour
  - Assumes lack of motivation is the main problem and that there are not other barriers to change
- Reductions in mortality (or other health goals)
  - Depends on effective (and cost-effective changes in behaviour)

Factors that can affect professional practice

- Cognitive factors
  - Information behaviour
  - Knowledge
- Motivational factors
  - Beliefs
  - Attitudes
- Behavioural factors
  - Coping behaviours
  - Skills
- Interaction in teams
  - Group processes and composition
  - Group norms
- Professional networks
  - Social network characteristics; e.g. weak ties
  - Leadership and key individuals
- Organisational structure
  - Clinical guidelines
  - Flexibility
  - Leadership structure
  - Specialisation
- Organisational processes
  - Quality improvement systems
  - External communication
  - Internal communication
- Organisational resources
  - Organisational size, size of teams
  - Technical knowledge & competance
- Societal factorss
  - Professional development and legal protection
  - Societal priorities
- Financial factors
  - **Positive incentives, resources, structures for rewards**
  - Disincentives
  - Provider utility function
  - Transaction costs
  - Competition intensity
- Regulation
  - Purchase-provider contract relatinships
  - Licensing rights

What evidence is there?

An overview of research on the effects of results-based financing

Prepared for the Norwegian Agency for Development Cooperation (Norad)

– Andrew D Oxman

– Atle Fretheim

Norwegian Knowledge Centre for the Health Services, Oslo, Norway

What evidence is there?

12 systematic reviews

- Financial incentives targeting recipients of healthcare and individual healthcare professionals appear to be effective in the short run for simple and distinct, well-defined behavioural goals.
- There is less evidence that financial incentives can sustain long-term changes.
- Evidence of the effects of RBF in LMIC
  - Conditional cash transfers (CCT) to poor and disadvantaged groups in Latin America are effective at increasing the uptake of some preventive services.
  - However, this may not be dependent on conditionality and may not be applicability in countries with weaker health systems.
  - There is otherwise very limited evidence of the effects of RBF in LMIC.
- RBF can have undesirable effects.

Undesirable effects of RBF

- Unintended behaviours
  - With CCT some mothers kept their child malnourished in order to retain eligibility.
  - CCT may have increased fertility by 2% to 4%, because pregnant women only were eligible for a subsidy.
  - An unexpected small negative impact of CCT on children's weight gain may have occurred because beneficiaries mistakenly thought that having at least one malnourished child was necessary for continued membership in the program.
- Corruption
  - Financial incentives may be stolen or misused, if not adequately managed.

Undesirable effects of RBF

- Distortions
  - Financial incentives may cause recipients to ignore other important tasks.
- Gaming
  - Financial incentives can result in gaming (changes in reporting rather than desired changes in practice).
- Cherry-picking
  - Performance incentives for providers can influence whether healthcare is accessible to patients by altering how willing healthcare workers or organisations are to care for sicker patients, more disadvantaged populations, or more difficult patients.
  - Programs that adjust for risk can also perpetuate disparities if they “excuse” providers from reaching equitable standards of care for disadvantaged populations.

Undesirable effects of RBF

- Dependency on financial incentives
  - Relying on incentives may foster dependency on them. If provider behaviours are not ingrained, they may disappear when the incentives end or new incentives are introduced.
- Demoralisation
  - Financial incentives can result in feelings of injustice and demoralisation. For example, if short-term professionals receive more financial incentives than those who have established long-term practices, or if there are perceptions of favouritism.
- Dilution of professionals' intrinsic motivation
  - Professionals are motivated by the satisfaction of doing their jobs well.
  - It is possible that financial incentives may dilute professionals' (or patients') intrinsic motivation.

Undesirable effects of RBF

- Bureaucratisation
  - RBF schemes may have substantial administrative costs associated with monitoring performance and managing disbursement of the financial incentives.
- Widening the resource gap between rich and poor
  - Performance incentives for providers may widen the resource gap that exists between organisations that serve disadvantaged patients and those that do not, and between countries.
  - RBF schemes that inadequately level the playing field may reward organisations for meeting standards that are much less attainable with disadvantaged populations.

What evidence is there?

A critical review of evaluations of RBF in LMIC

- The use of RBF in LMIC has commonly been as part of a package that may include increased funding, technical support, training, changes in management, and new information systems.
- It is not possible to disentangle the effects of financial incentives as one element of RBF schemes and there is very limited evidence of RBF per se having an effect.
- RBF schemes can have unintended effects.

Must Conditional Cash Transfer Programs Be Conditioned to Be Effective?

The Impact of Conditioning Transfers on School Enrollment in Mexico

Alan de Brauw and John Hoddinott 2008

These results speak directly to policy debates regarding the merits of conditionality within CCT programs. They suggest that debates over “to condition or not to condition” are overly simplistic. In the case considered here, there is clearly little benefit to conditioning transfers based on enrolment in primary school. However, in terms of increased school enrolment, there are large benefits associated with conditioning transfers at entry into lower secondary school.

Why bother evaluating RBF?

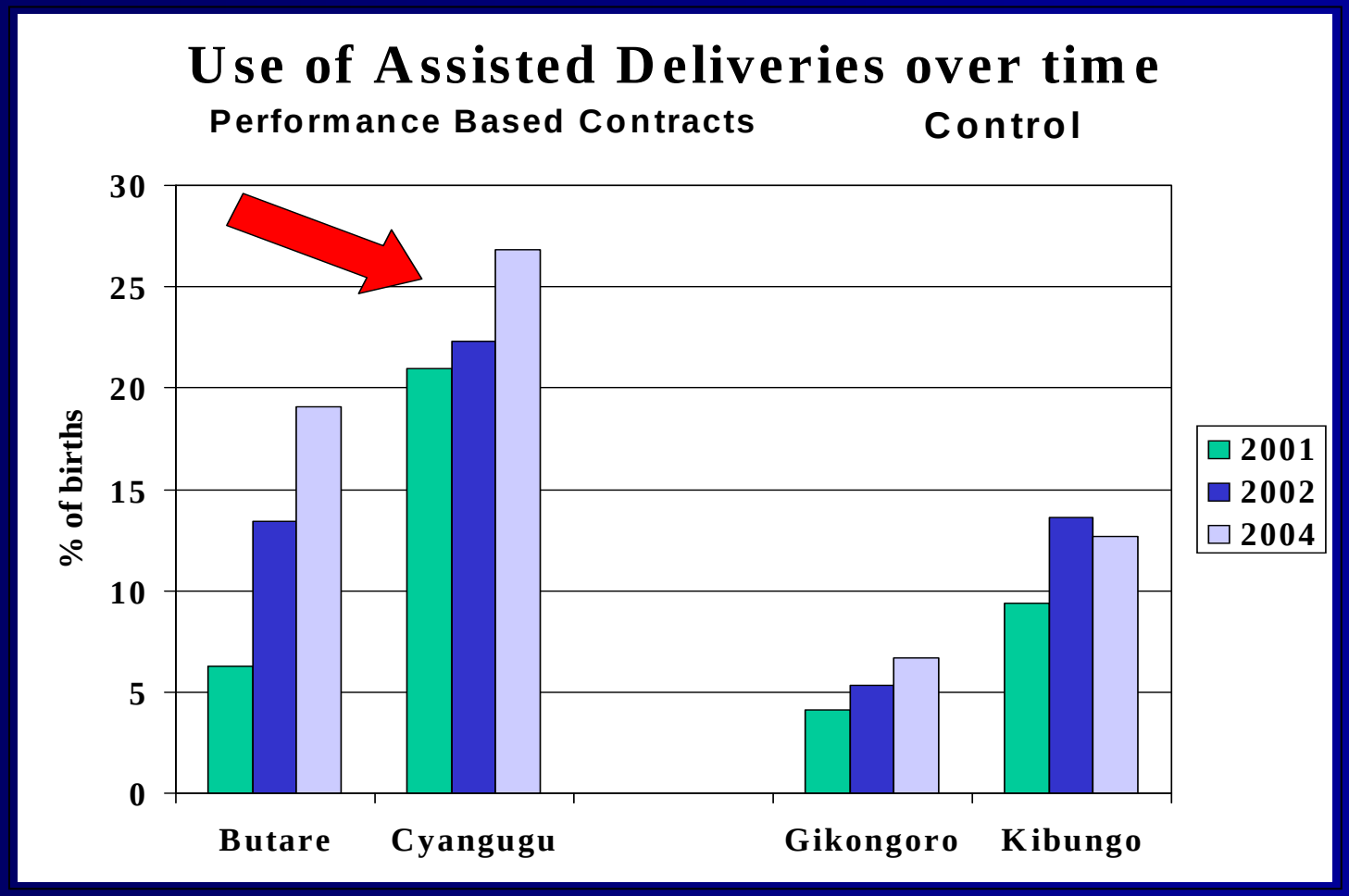
- The benefits are uncertain
- RBF can do harm
- Effects attributed to RBF may not be due to conditionality
- RBF may not be worth it
  - Small effects
  - Large costs
- Although RBF seems like a simple concept, it is complex to implement
  - “Learning from experience” is likely to be misleading without well designed impact evaluations

How should RBF be evaluated?

"Discovery stage"

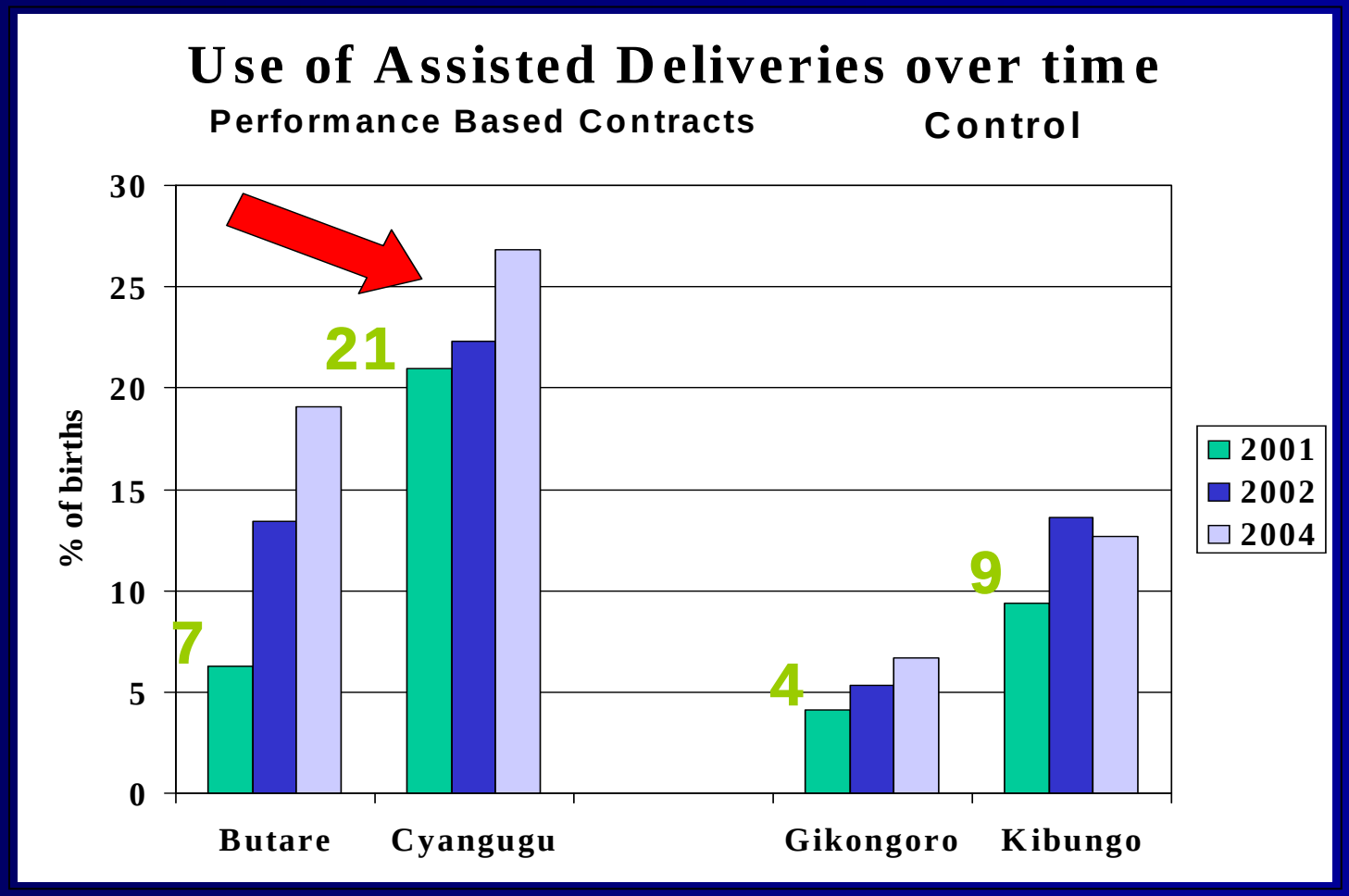
- **Before-after studies** rarely provide useful evidence of impacts
- **Controlled before-after studies** (and small cluster randomised trials) are not much better
  - Clustering rarely taken account of in CBA studies
- **Impact evaluations should be randomised**
  - Should include a sufficient number of clusters
  - Should include
    - Non-targeted behaviours
    - Adverse effects (gaming, cherry picking, etc.)
    - Costs
  - Should include process evaluations
- **Interrupted time series analyses** may be helpful

Assisted deliveries in Rwanda



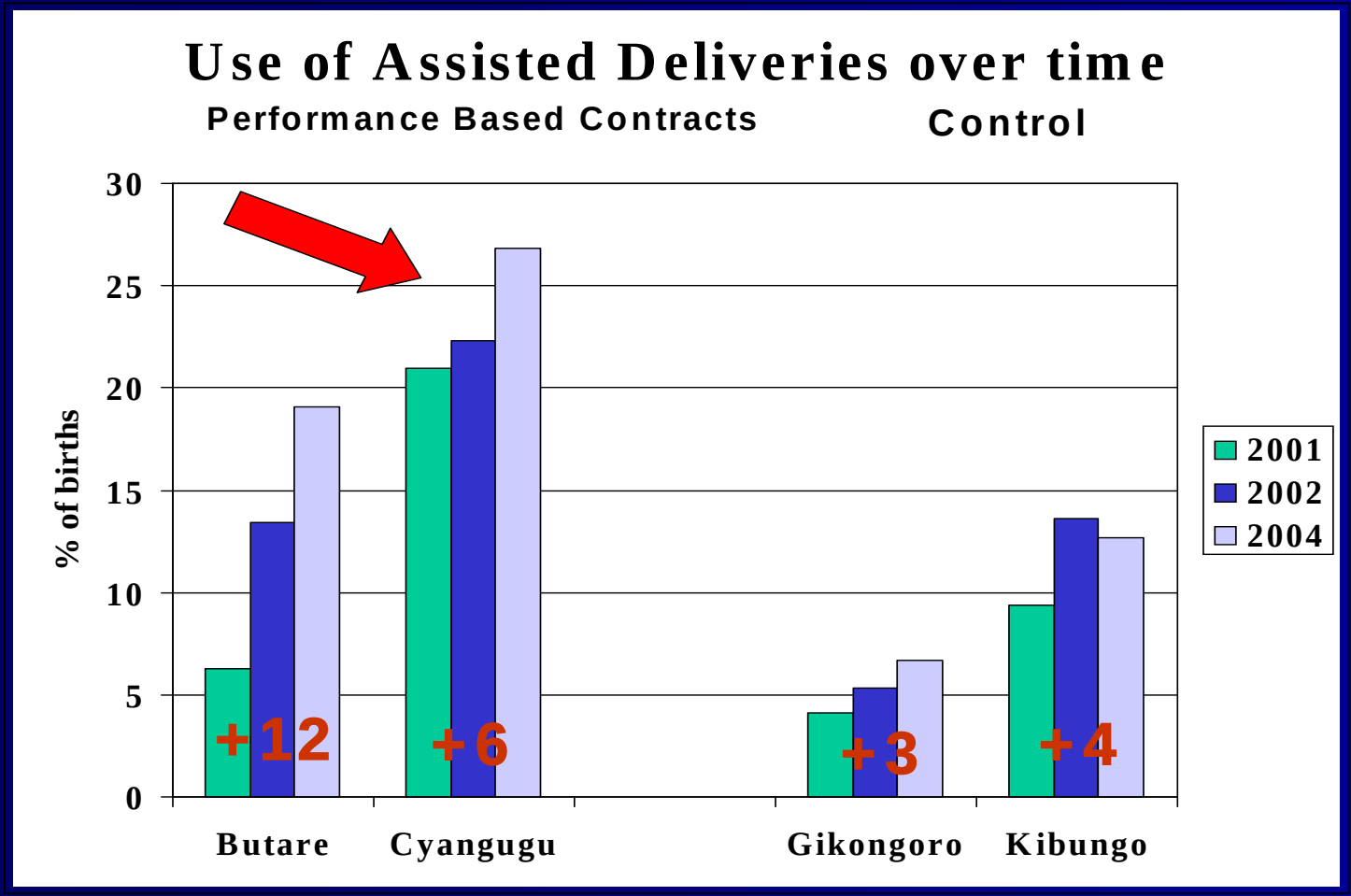
Assisted deliveries in Rwanda

The provinces were not comparable at baseline.



Assisted deliveries in Rwanda

Differences between RBF provinces > differences with control



What should be evaluated?

- What intervention?
  - RBF, RBFS or both?
- What should the comparison be?
  - Alternative financing with equivalent funding
  - Equivalent technical support and training?
- Criterion for success?
  - “statistically significant change in critical MDG 4 and 5 results (outputs and outcomes)”
  - Who will define minimally important differences and how?

Is RBF the right focus?

- Focus should start with the problem or goal (MDG 4 & 5) not with a solution (RBF), which may or may not be the right one
- There are other equally or more important foci; e.g. CHI/SHI, QI, health systems, co-ordination, non-health sector interventions?
- Focus should be on a tool kit rather than a tool

Key challenges

- An approach that begins with goals and problems rather than with solutions
  - RBF as a tool in a tool kit
- Evaluations that test conditional incentives (not packages of which conditional incentives are a small part)