

Overcoming Challenges: Assessing the Current State of Disaster Health Science

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Hurricane Irma - VIIRS - I-Band 5
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CIMSS

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Disclaimer

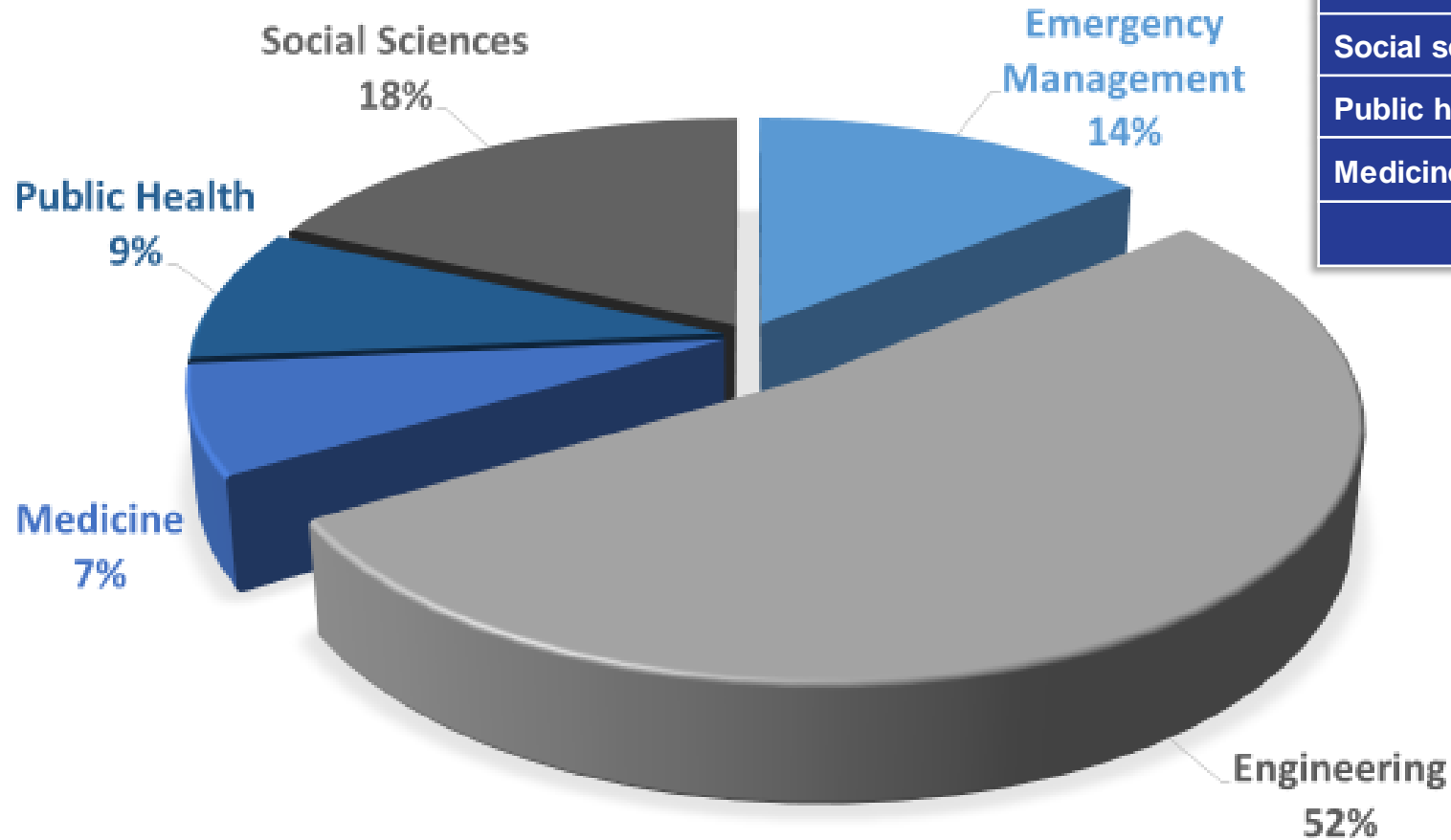
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Quantitative Studies

Kirsch TD, Keim M. *US governmental spending for disaster-related research, 2011-2016: Characterizing the state of science funding across five professional disciplines*. Disaster Med Public Health Prep 2019.

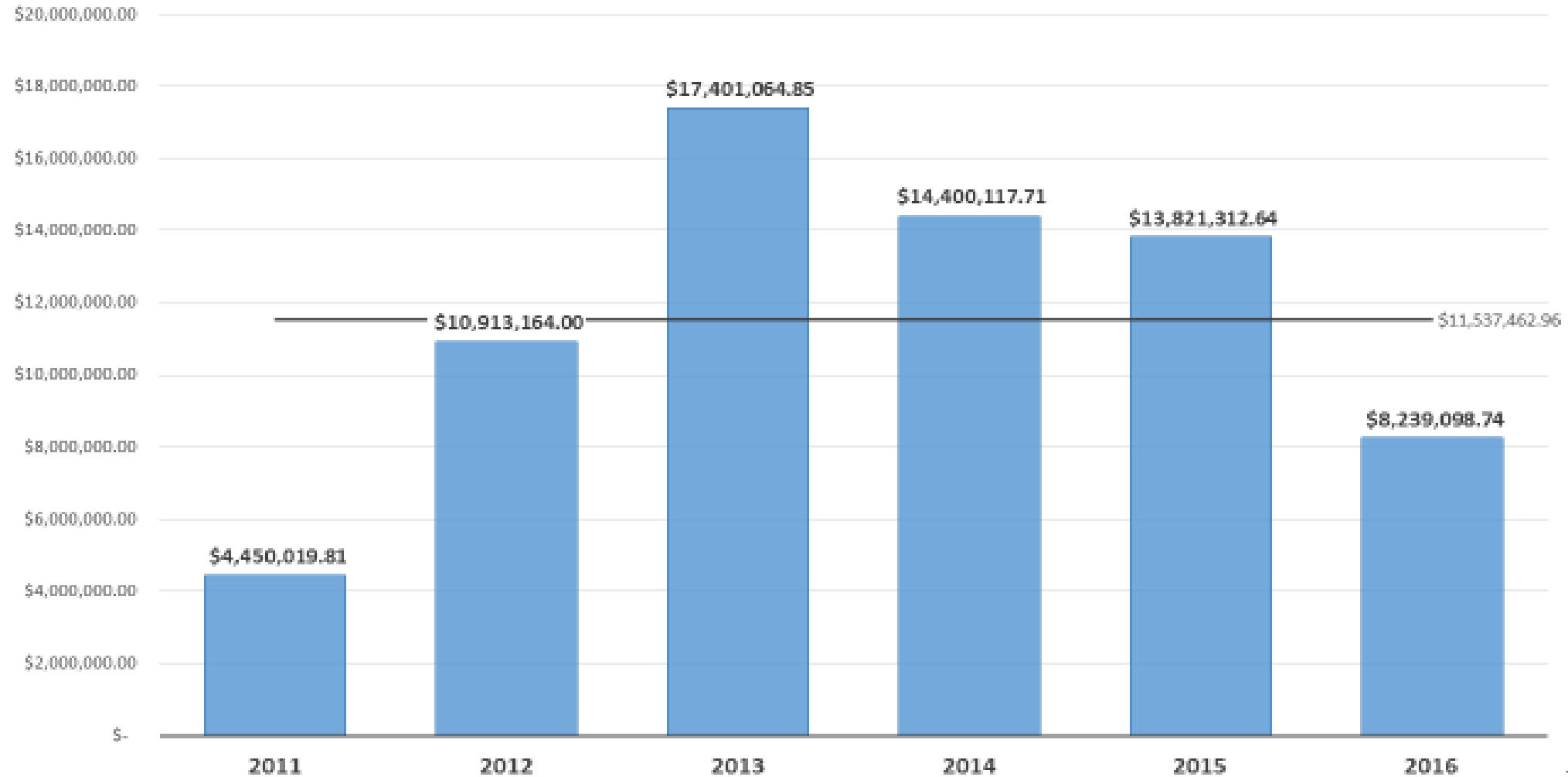
Keim ME, Kirsch TD, Lovallo A. *US federal government spending for research related to national public health preparedness capability standards, 2008-2017*. Disaster Med Public Health Prep 2019.

Funding by Discipline, 2011-16



Engineering	\$34,458,858.15
Emergency management	\$11,643,179.60
Social sciences	\$11,097,207.00
Public health	\$6,578,417.00
Medicine	\$5,547,468.00
Total	\$69,325,129.75

Disaster Research Spending, 2011-16



Funding for disaster research as compared to other Federal health programs, 2016

National Cancer Institute
\$5.3 BILLION

CDC PHEP
\$838 Million

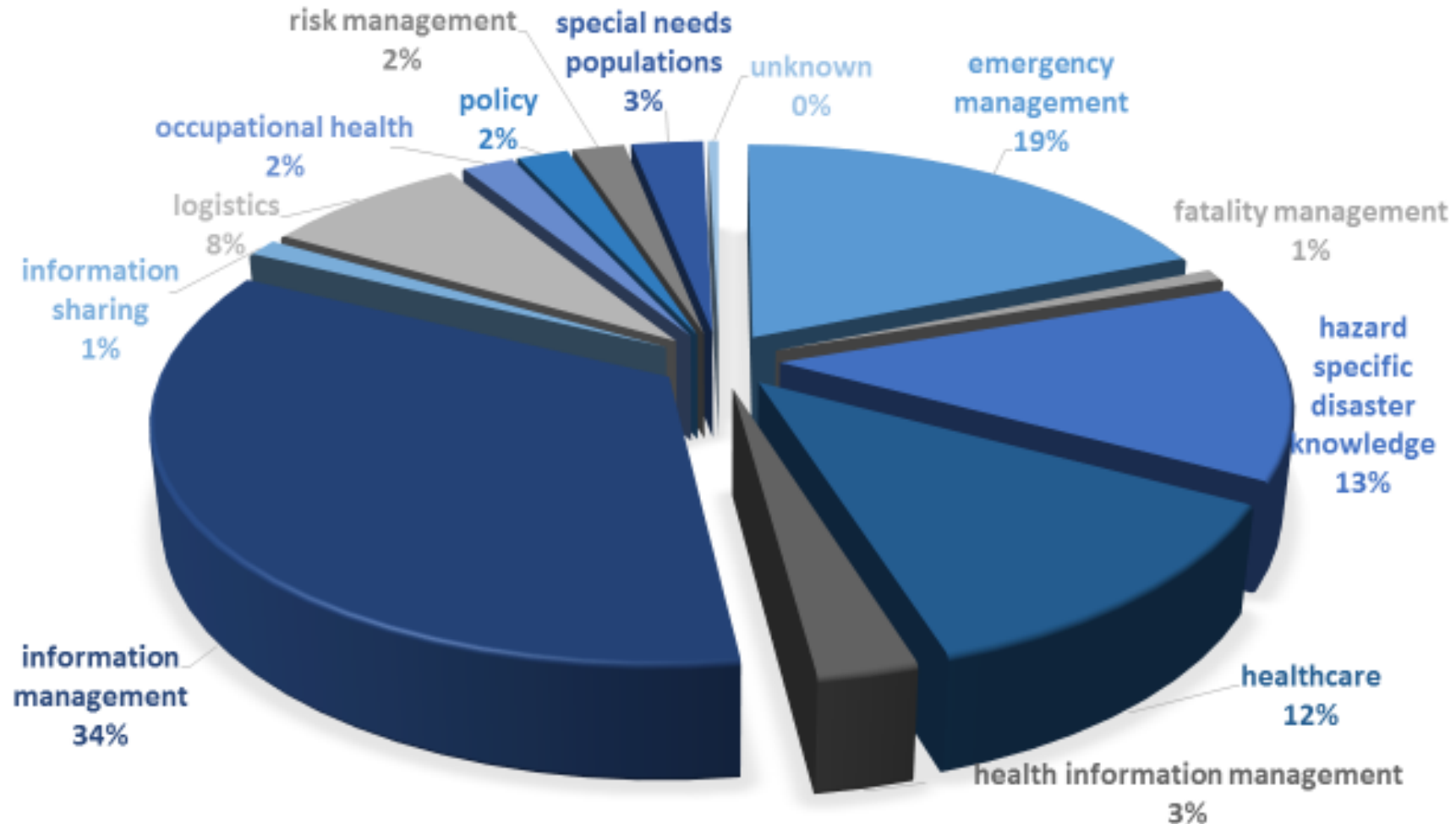
**DISASTER
HEALTH
RESEARCH
\$8 Million**

**NIH
\$31 BILLION**

NCDMPH



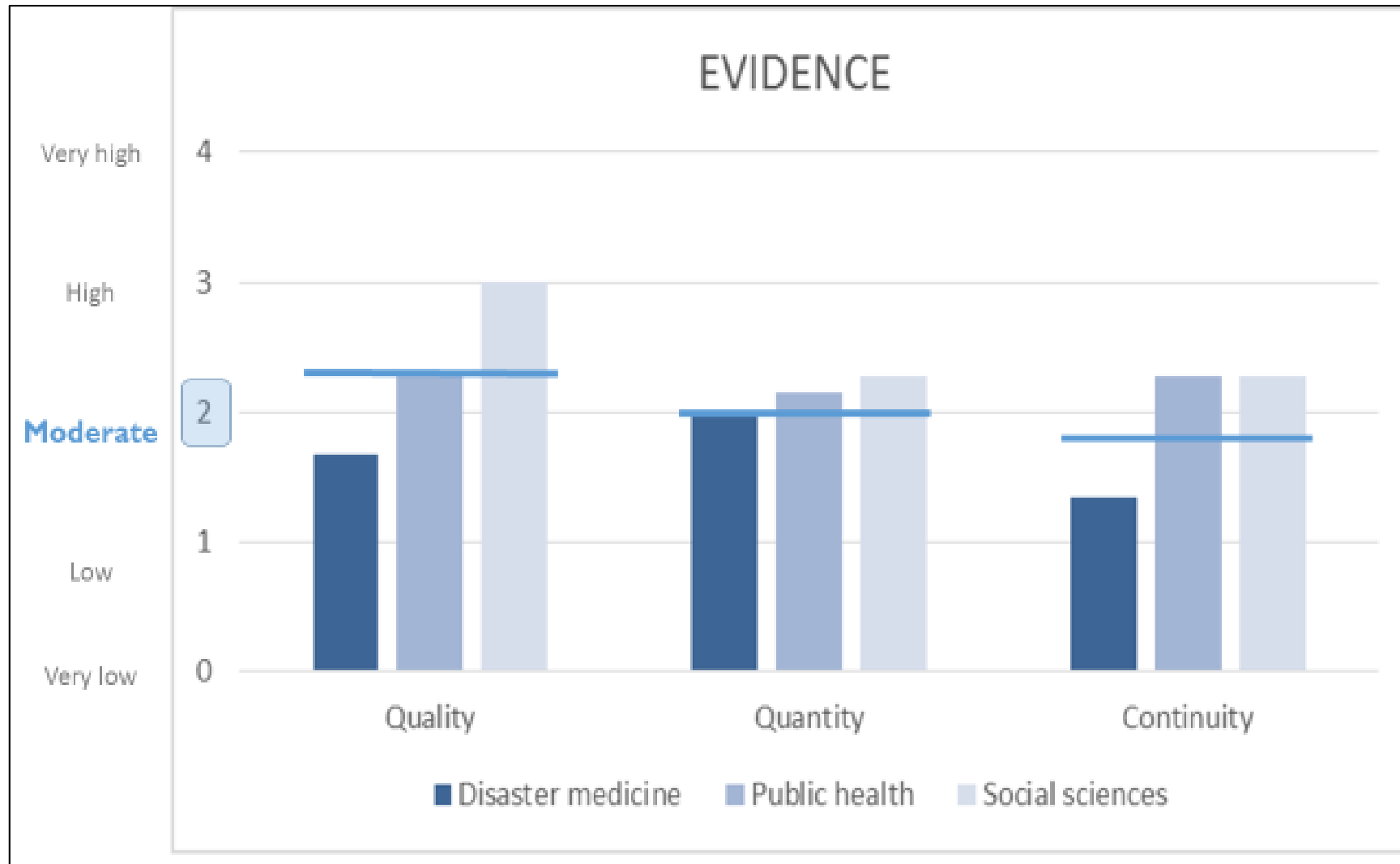
Funding by Disaster Capability, 2011-16



Qualitative Study

Kirsch TD, Strauss-Riggs K, Reed P, Sauer L. *Strengths, Weaknesses, Opportunities and Threats that Impact Disaster Health Research*. Am J Disaster Medicine. 2020 (in press).

Strength of Scientific Evidence by Discipline



Comments from the Experts

“The ***field lurches from disaster to disaster*** oftentimes losing the sustained scholarly attention that could advance the science”

“***ad hoc approaches to funding*** for specific disaster events at the expense of the broader science”

“***fickle and fluid priorities*** on behalf of federal state, and local leadership”

“many persons in this discipline have ***little understanding of basic research methods***”

“***few major advancements have been made***” in disaster research

Key Themes

- Overarching theme - Limited, inconsistent, and episodic funding for disaster health research.
 - Funding typically occurs in an **ad-hoc, disaster event-specific** manner without any consideration for previous work.
 - Funding is **politically-influenced** by state and federal governments.
- Critical gap - An **absence of theoretical and conceptual frameworks** that define and shape the field.

Academic Impact

- Low quality research – Many **anecdotally-driven** papers.
- A **lack of incentive for faculty to research disasters**. Tenure is more difficult because disaster health is often not seen as a legitimate sub-discipline.
- The **pool of researchers is small**.
- The **workforce is aging** and a wave of retirements is pending.
- **Relationships** between academia and the practice and policy partners are inconsistent and **difficult to sustain**.
- **Interdisciplinary research is discouraged**.

Thank you

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