HTAi HEALTH TECHNOLOGY ASSESSMENT iNTERNATIONAL

iDSI Better decisions. Better health.

HTA in Sub-Saharan Africa and its use in priority setting

Sam Hollingworth & Mohamed Gad

Setting Health Priorities 2018

Why?

- HTA in SSA
- What do we know?
- Two approaches
  1. Literature search
  2. HTA survey

Why?

- HTA in SSA
- What do we know?
- Two approaches
  1. **Literature search**
  2. HTA survey

How?

- Literature search:
- Databases: PubMed, Embase, Scopus, Proquest, Business
- Dates: xx to yy
- Terms:
  - HTA
  - SSA
  - Capacity building

What?

- ~6,000 articles
- title and abstract scan + full text review
- N=48
- descriptive analysis
- narrative synthesis

Results – study types

Study type	Journal article		Confer. abstract		Other		TOTAL	
	n	%	n	%	n	%	n	%
Primary research	22	46%	4	8%	-	-	26	54%
Qualitative	14	29%	1	2%	-	-	15	31%
Interview	14	29%	1	2%	-	-	15	31%
Quantitative	3	6%	1	2%	-	-	4	8%
Survey	3	6%	-	-	-	-	3	6%
Not specified	-	-	1	2%	-	-	1	2%
Mixed	5	10%	2	4%	-	-	7	15%
Survey + others	2	4%	2	4%	-	-	4	8%
Discrete choice experiments	3	6%	-	-	-	-	3	6%
Review	15	31%	2	4%	-	-	17	35%
Narrative review	11	23%	1	2%	-	-	12	25%
Systematic review	4	8%	1	2%	-	-	5	10%
Other (editorial, letter, etc.)	-	-	-	-	5	10%	5	10%
TOTAL	**37**	**77%**	**6**	**13%**	**5**	**10%**	**48**	**100%**

Results – Countries I

- Many SSA countries
- 4 countries = 53% of all papers
- South Africa, Ghana, Uganda, Cameroon
- 27 (56%) only one country
- 9 (19%) ≥ 2 countries
- 12 (25%) no country specified (e.g. SSA, LMIC)

Country	**n**	**%**
South Africa	*16*	*25%*
Ghana	*9*	*14%*
Uganda	*5*	*8%*
Cameroon	*4*	*6%*
Ethiopia	3	5%
Mali	3	5%
Tanzania	3	5%
Democratic Republic of Congo	2	3%
Kenya	2	3%
Nigeria	2	3%
Rwanda	2	3%
Benin	1	2%
Botswana	1	2%
Burkina Faso	1	2%
Chad	1	2%
Cote d'Ivoire	1	2%
Gabon	1	2%
Guinea	1	2%
Namibia	1	2%
Niger	1	2%
Senegal	1	2%
Swaziland	1	2%
Zambia	1	2%
Zimbabwe	1	2%
TOTAL	**64**	**100%**

Results – First authors

- 23 authors from SSA
- Of those, 20 authors are academics - university or research institutes
- 25 authors from other countries (11 from Americas, 10 from Europe/UK)

Region	Academic		Government		Other		NA		TOTAL	
	n	%	n	%	n	%	n	%	n	%
SSA	20	42%	3	2%		0%		0%	23	44%
America	9	19%		0%	2	4%		0%	11	23%
Europe/UK	8	17%	1	6%	1	2%		0%	10	25%
Other	2	4%		0%		0%	2	4%	4	8%
TOTAL	**39**	**81%**	**4**	**8%**	**3**	**6%**	**2**	**4%**	**48**	**100%**

Results – Corresponding/last authors

- 14 authors from SSA
- 34 authors from other countries
- more distributed to various countries than first authors

Region	Academic		Govt		Other		NA		TOTAL	
	n	%	n	%	n	%	n	%	n	%
SSA	11	23%	2	4%	1	2%	-	-	14	29%
America	5	10%	-	-	2	4%	-	-	7	15%
Europe/UK	15	31%	2	4%	3	6%	-	-	20	42%
Other	1	2%	-	-	2	4%	-	-	3	6%
NA	-	-	-	-			4	8%	4	8%
TOTAL	**32**	**67%**	**4**	**8%**	**8**	**17%**	**4**	**4%**	**48**	**100%**

Results – Participants; Technology

Participants	n	%
Policy maker	21	44%
Other (health professionals, NS e.g. stakeholders)	5	10%
Not applicable	22	46%
Total	**48**	**100%**

Technology	n	%
Pharmaceuticals	12	25%
Medical device	2	4%
Not applicable	34	71%
Total	**48**	**100%**

Results – narrative synthesis I

Results – narrative synthesis II

Acknowledgements

- Dr Sam Hollingworth (U Queensland)
- Dr Su-Yeon Yu (U Queensland)
- Ms Christine Dalais (U Queensland)
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- Dr Mohamed Gad (iDSI)
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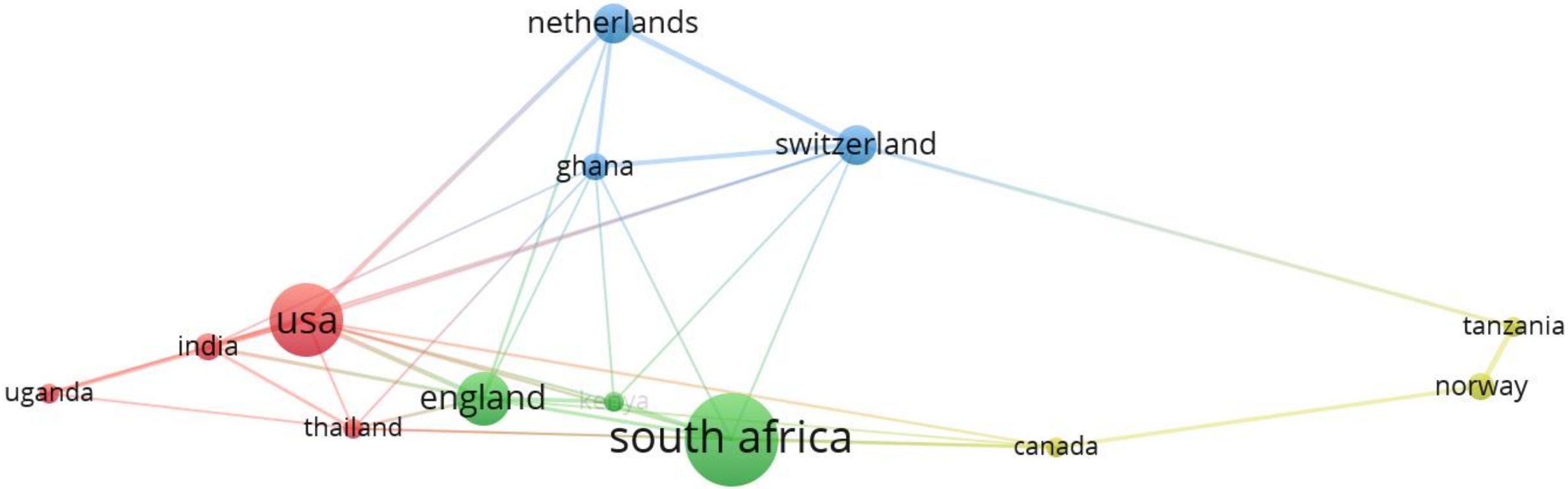
Bibliometric analysis I

- VosViewer (vosviewer.com)
- Hollingworth, Yu & Dalais
- WoS articles n=42 (NB total n= 48)
- Analysis - bibliographic data
  - country
  - all keywords
- Analysis - text data
  - title and abstract

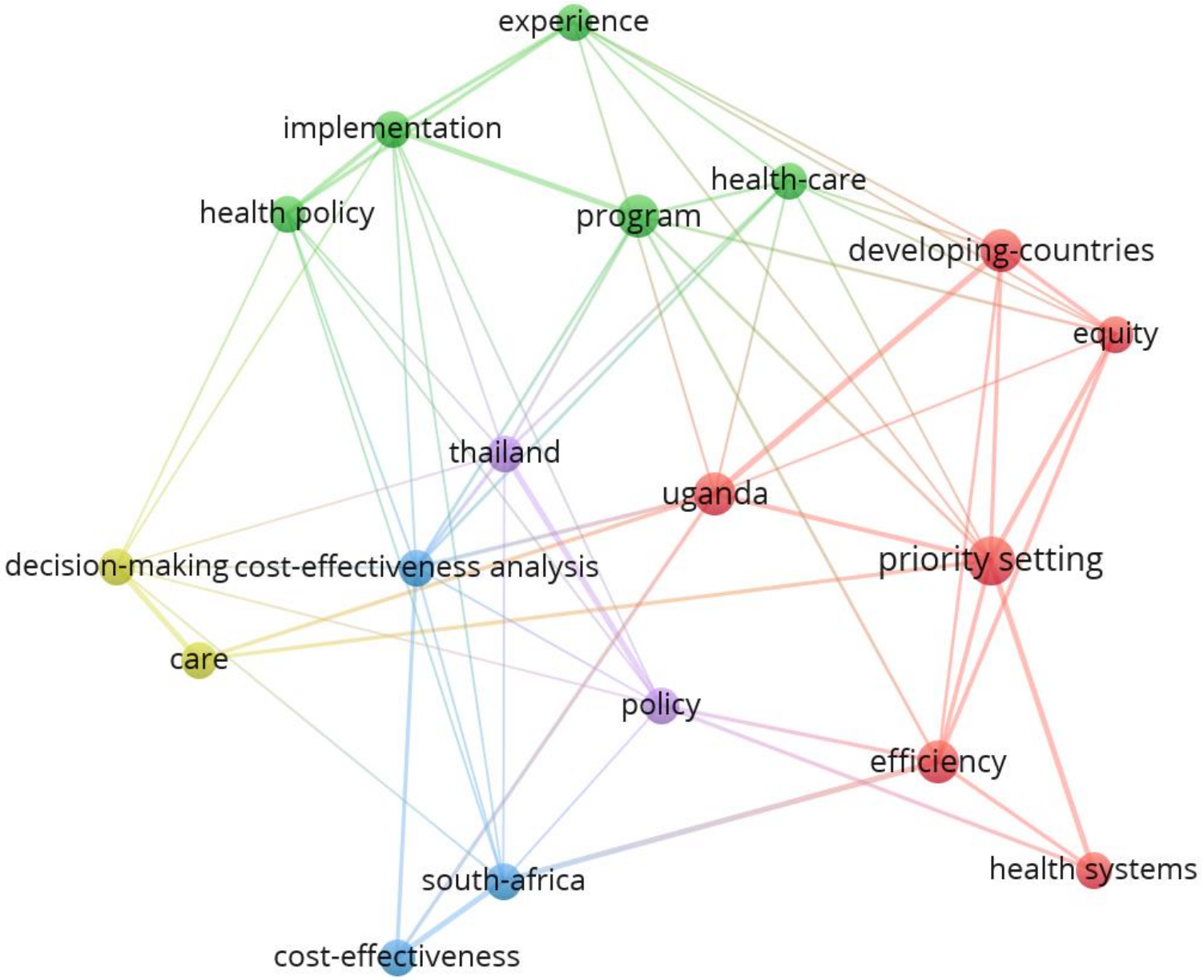
Countries

Type of analysis: co-authorship
Unit of analysis: countries
Counting methods: fractional counting
Min no. documents of a keyword: 3



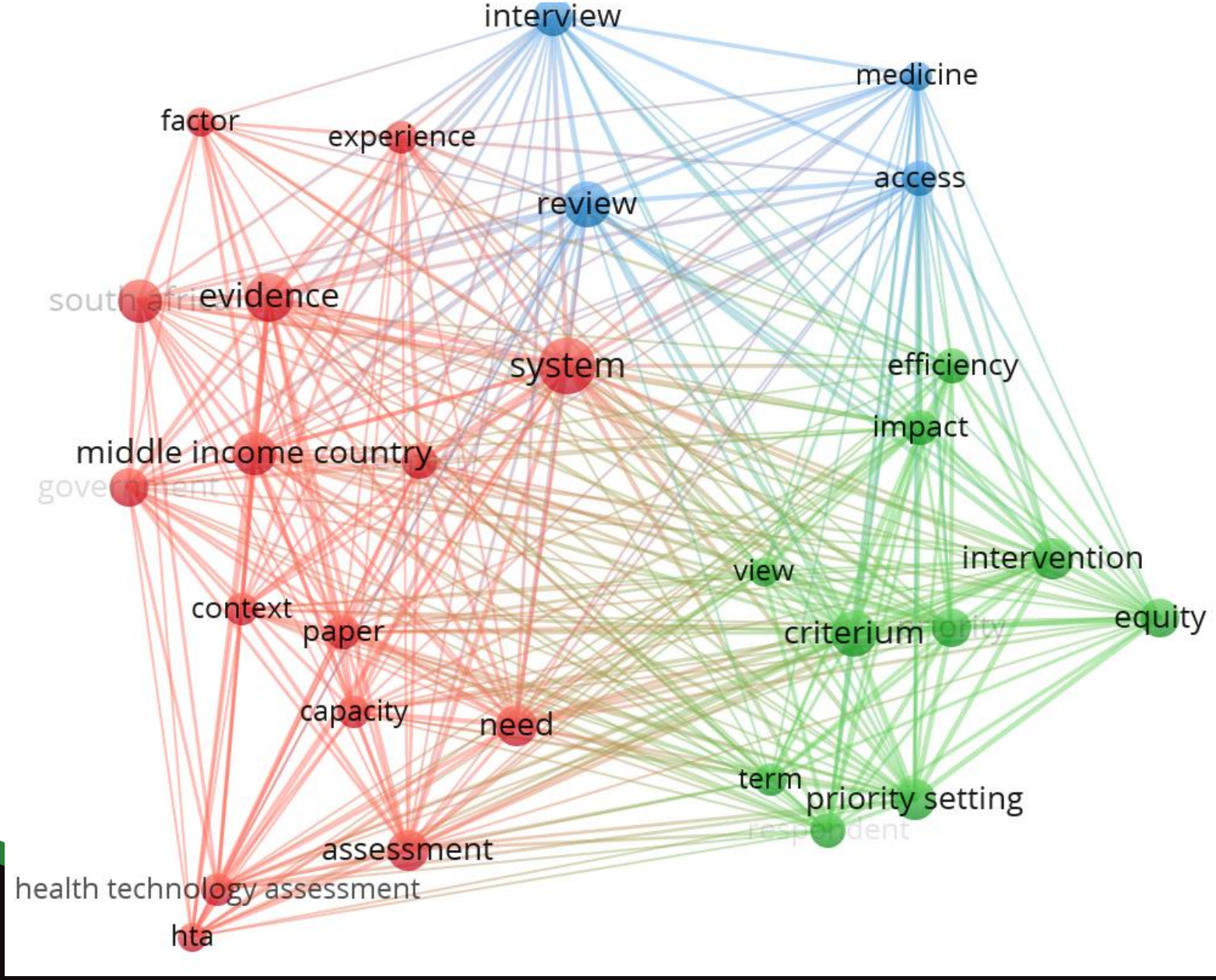
All keywords

Type of analysis: co-occurrence
Unit of analysis: all keywords
Counting methods: fractional
Min no. documents of a keyword: 3

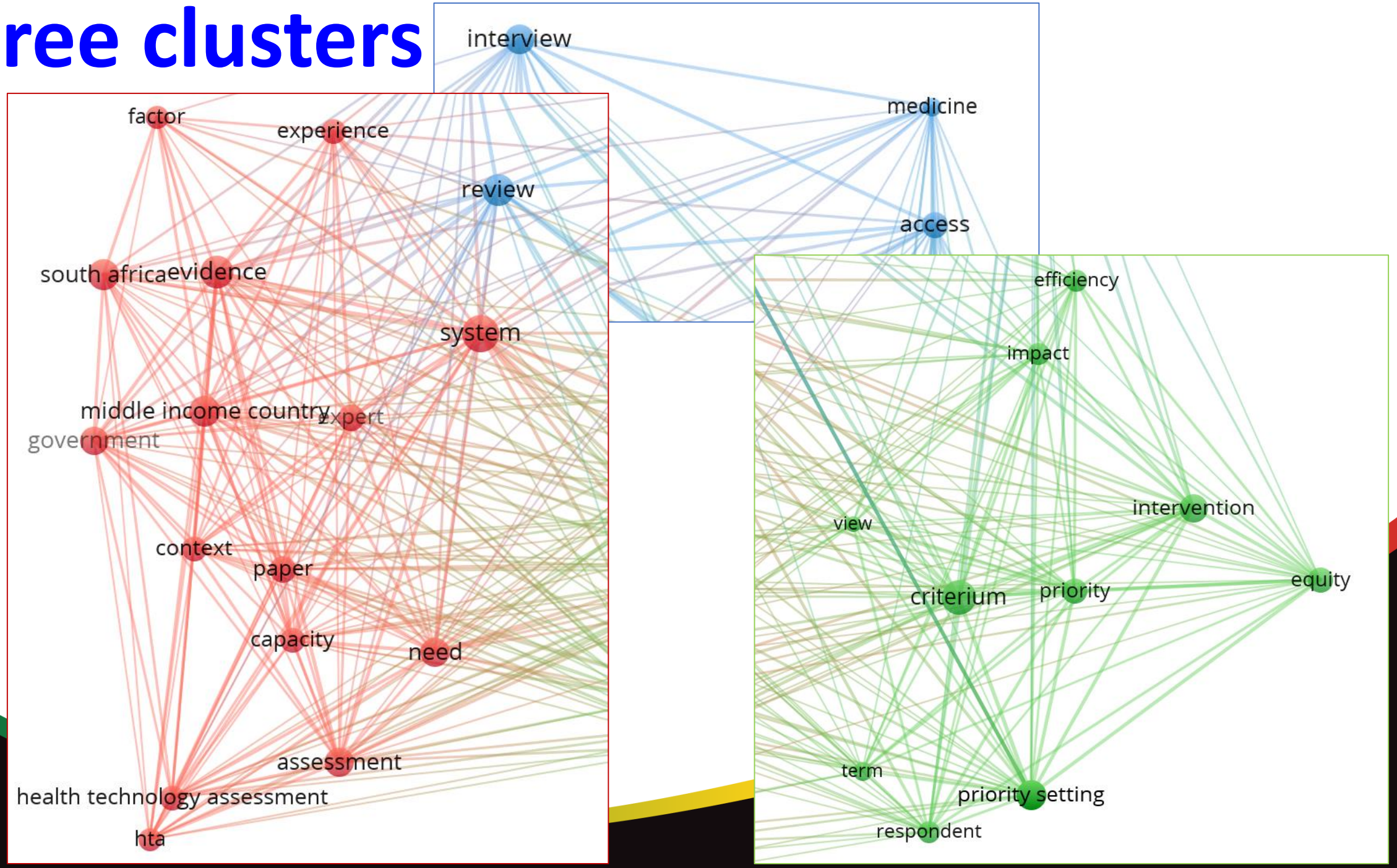


Title and abstract

Text data analysis : title & abstract
Counting methods: binary
ıo. documents of a keyword: 5



Three clusters

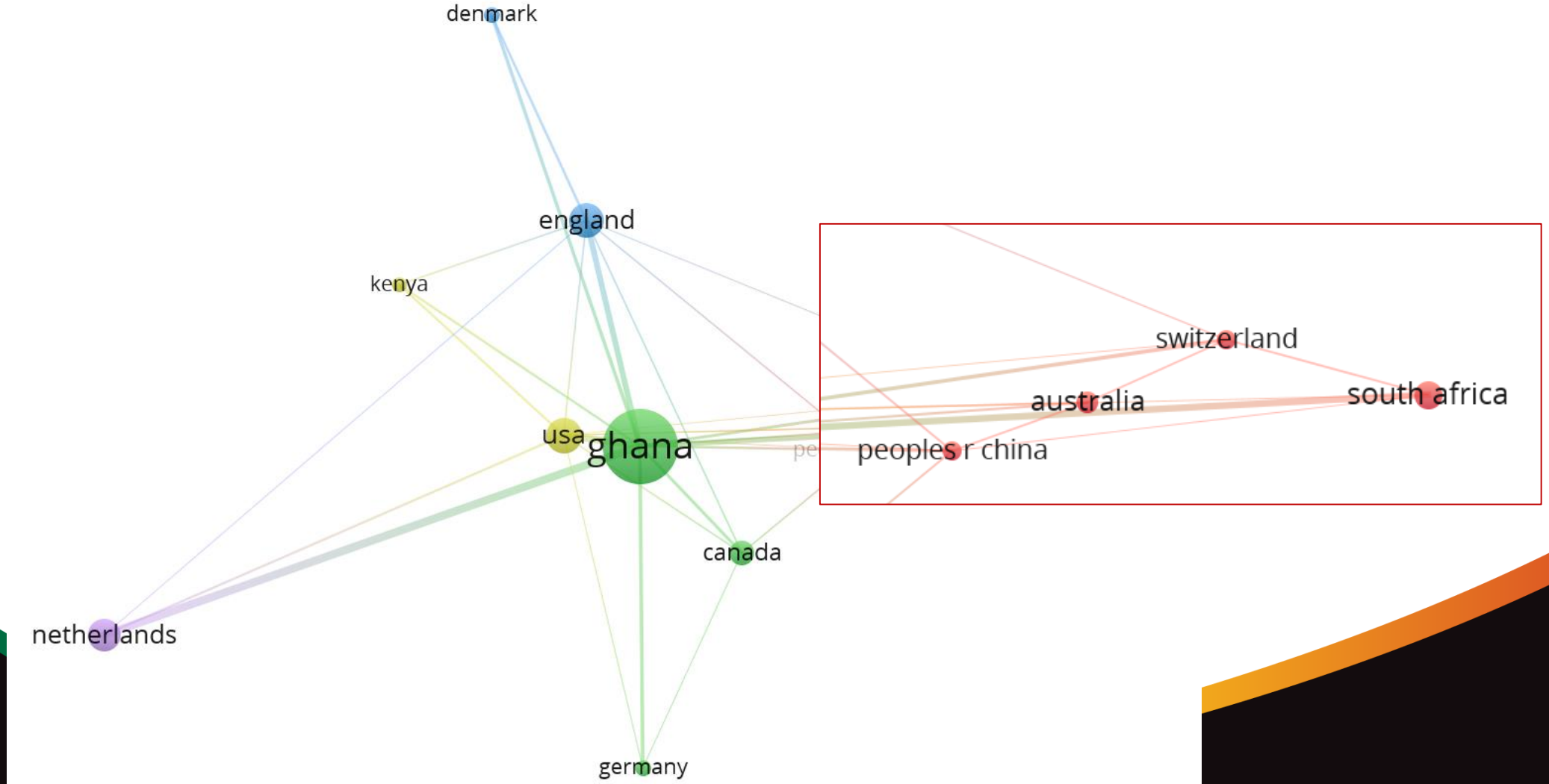


Bibliometric analysis II

- VosViewer (vosviewer.com)
- Hollingworth, Yu & Dalais
- **Ghana + National Health Insurance Scheme, NHI Authority, health benefits package, essential medicines list**
- n=205
- Analysis - bibliographic data
  - country
  - all keywords
- Analysis - text data
  - title and abstract

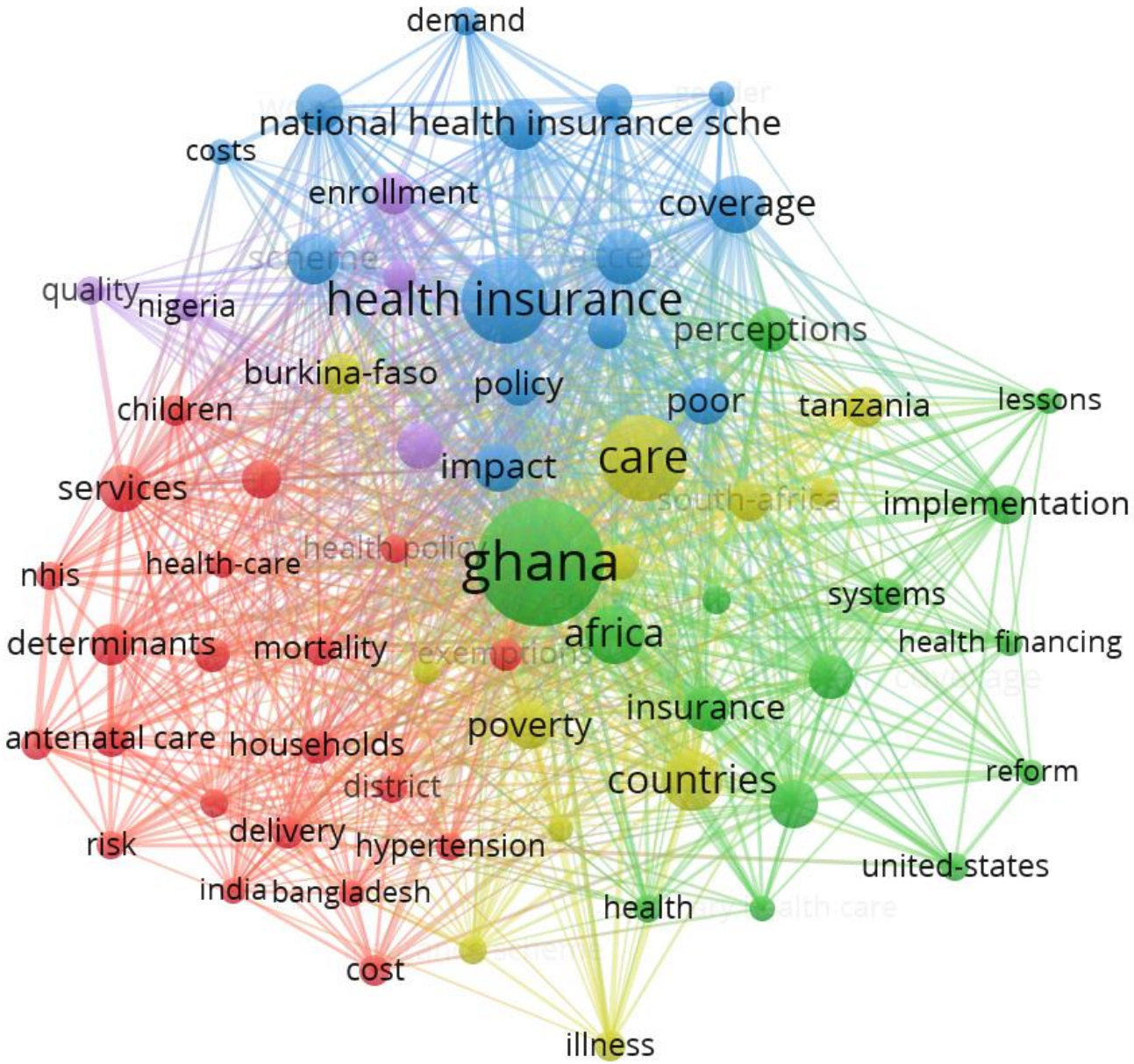
Countries

Type of analysis: co-authorship
Unit of analysis: countries
Counting methods: fractional
Min no. documents of a keyword: 5



All keywords

Type of analysis: co-occurrence
Text data analysis: all keywords
Counting methods: fractional
Min no. documents of a keyword: 3



Title and abstract

Text data analysis : title & abstract
Counting methods: binary
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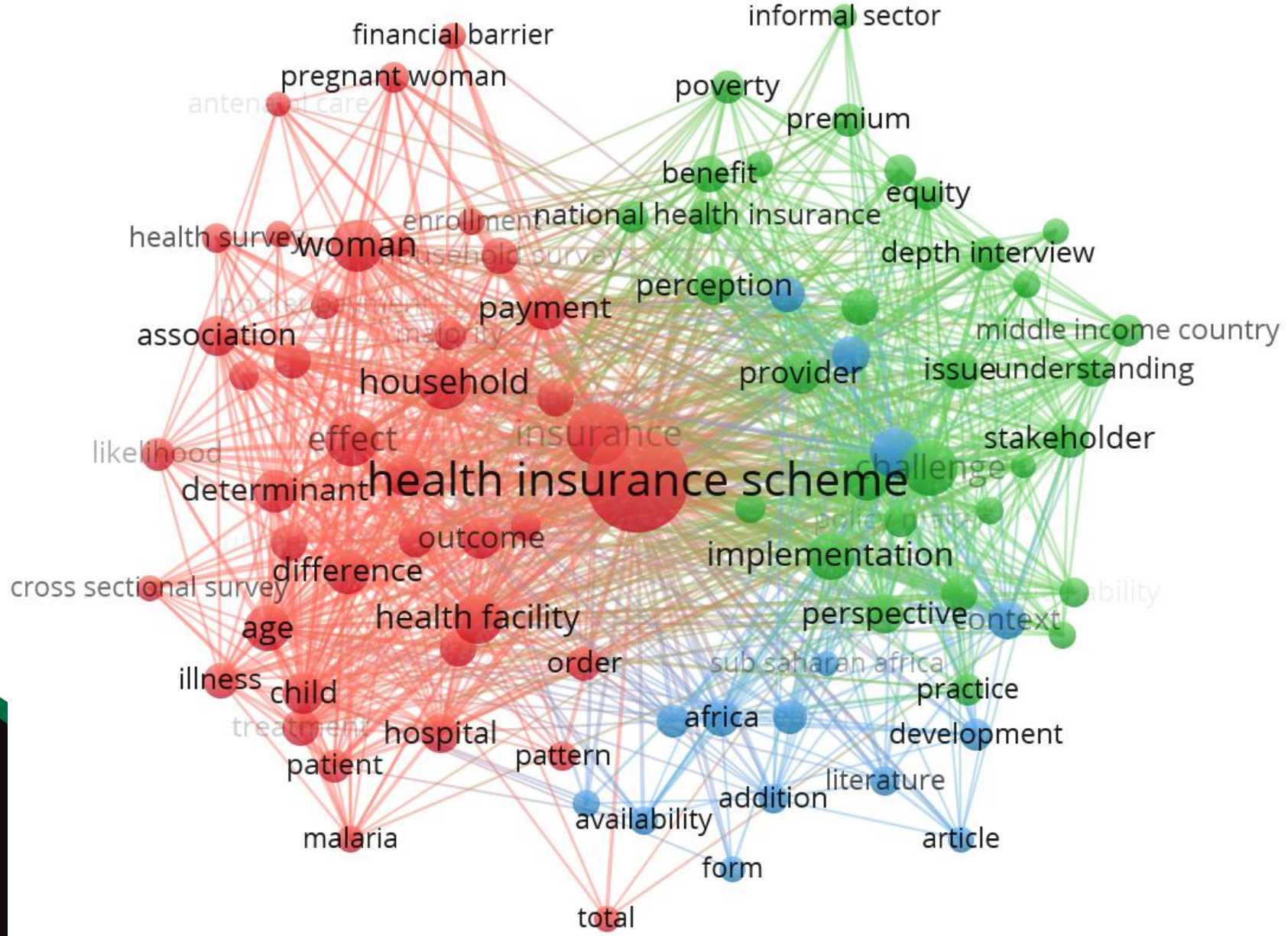
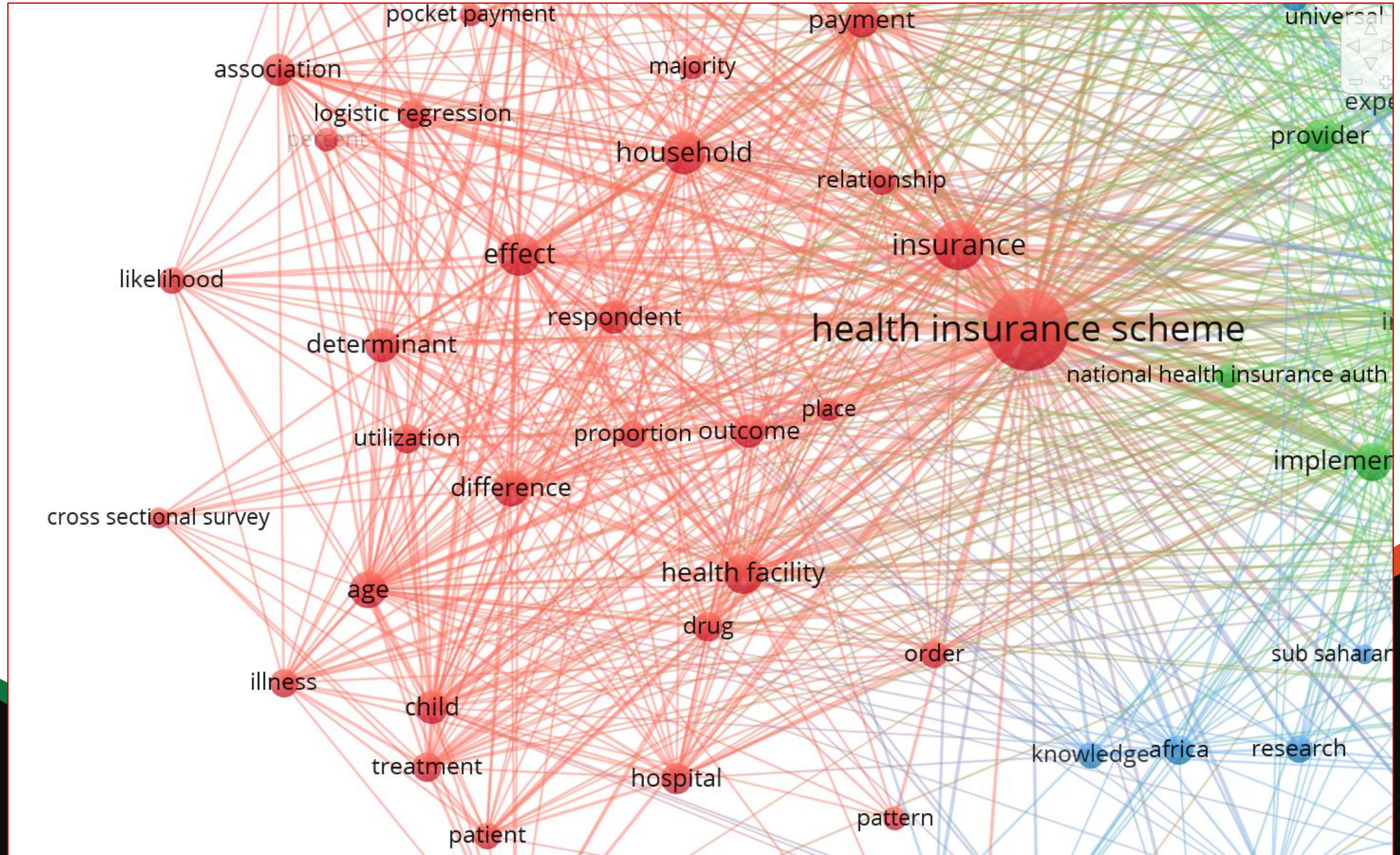
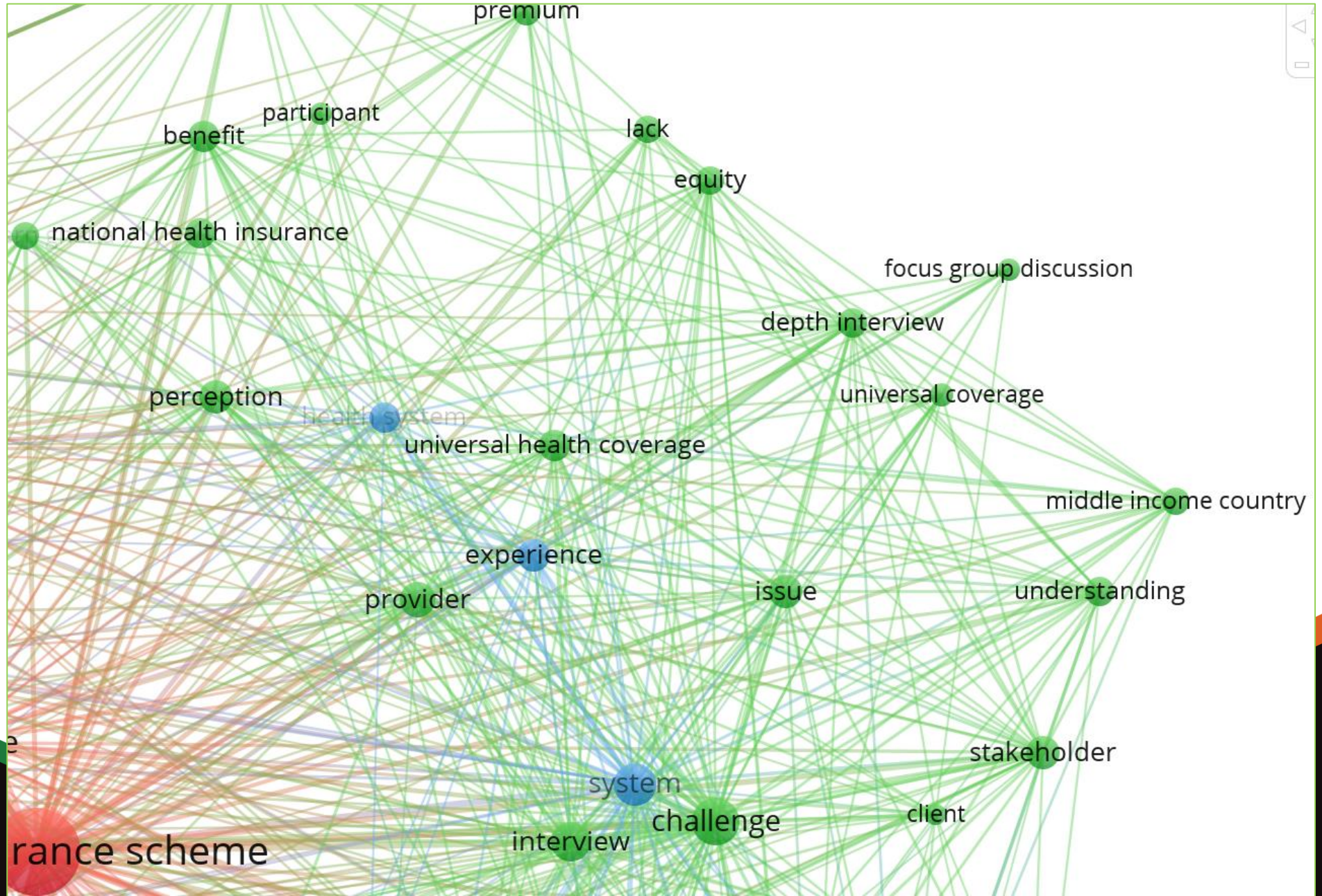


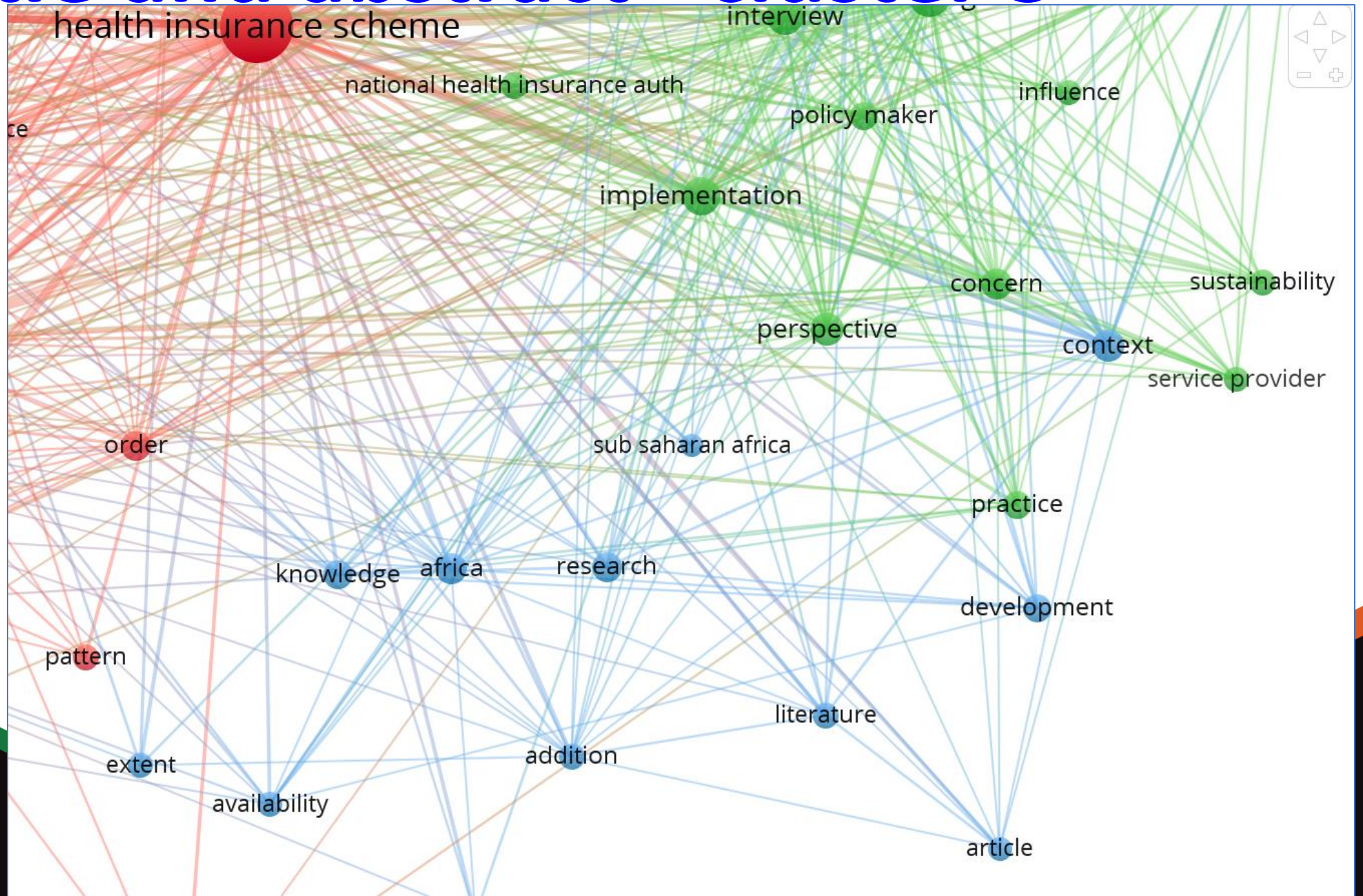
Title and abstract - cluster 1



Title and abstract - cluster 2



Title and abstract - cluster 3



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Outline

- HTA in SSA
- What do we know?
- Two approaches
  1. Literature search
  2. **HTA survey**

Why?

- HTA is an effective tool to support priority setting (PS) in health at multiple decision-making levels.
- Stakeholder groups need to understand HTA appropriate to their role and to interpret and critique the evidence produced.
- iDSI has been working in sub-Saharan Africa (SSA) since 2013 to develop local capacity and support countries to implement robust HTA processes.

Aim

- ✓ assess the current health system priorities and policy areas of demand for HTA
- ✓ identify gaps in data and skills to improve the targeting of capacity-building in SSA

How?

1. iDSI survey (revised, cross-sectional)

- Distribution to n=357
  - iDSI networks, AfHEA (African Health Economics & Policy Association; afhea.org
  - policy makers and those who inform policy decisions (national, sub-nat.)
  - those who are interested how HTA can improve PS in health,
  - potential suppliers of HTA-relevant data
- Analysis + explore key themes

2. Industry survey
   - HTAi (Asia)
   - poor response , no data presented

Survey findings I

- N=51 responses (14%) , 14 SSA countries
- mostly universities and ministries of health
- Main limitations
  - low response rate 14%, many Ghana and Nigeria
  - self-selected respondents
- HTA → an **important and valuable PS tool** with a key role in the design of health benefits packages, clinical guideline development, and service improvement.

Survey findings I

- Consider some tables/ figures??

Survey findings II

- **Medicines** were the technology most identified as being a critical area for undertaking HTA (followed by vaccines and public health programs), especially because of their **high costs** and ability to address major **disease burdens**.
- The use of HTA to address **safety issues** (e.g. low quality medicines) and **value for money** concerns was seen as particularly important, perhaps reflecting problems in SSA relating to **service quality and efficiency**.

Survey findings III

- The perceived **availability and accessibility** of suitable **local data** to support HTA varied widely but in many instances was considered **inadequate and limited**.
- Strong need for **training support** in **research methodology** and **data gathering** for HTA evidence.

Conclusions

- This survey across SSA was successful in **raising awareness** of HTA as a tool for priority setting and **identifying key gaps** in **data and capacity**.
- → iDSI will develop a more tailored and expansive survey around the key themes identified in this initial survey to tailor **engagement strategies** and target **capacity building**.

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