

Inter-sectoral Collaboration and Innovation Adoption in the English NHS

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Background

Innovation adoption in the National Health Service (NHS) in England has **received attention** due to the **slow rate of delivery** from proven efficacy to widespread adoption. On average, delivery of innovations to widespread adoption may take up to **15 years** (Llewellyn et al., 2014).

- Academic, industrial and the healthcare sectors are currently becoming the **key to innovation growth in an increasingly knowledge-based economy**.
- The interaction and boundaries among the three sectors are **constantly evolving**, in a flux that **changes the knowledge infrastructure** through collaboration.
- The task to create, sustain, and retain collaborations is **complex**.
- Inter-sectoral collaboration is imperative to drive innovation adoption for the **future of the healthcare system**.

Aim

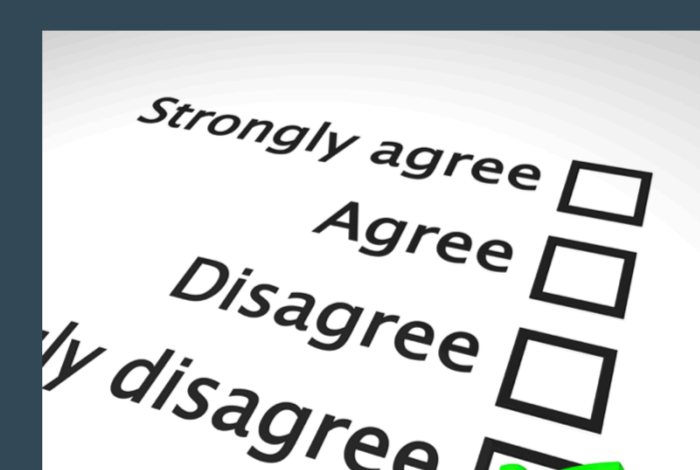
The aim of the study was to understand the current attitudes of professionals from academia, industry and the NHS toward inter-sectoral collaboration in Diabetes innovation adoption.

Methods

An online questionnaire was constructed and distributed to professionals in academia, industry and the NHS.

The questionnaire contained the following sections:

- Demographic data
- Collaboration experience
- Work experience
- Barriers and facilitators to inter-sectoral collaboration (5-point Likert scales)
- Perceptions of each sector (7-point semantic differential scales)
- Open-ended questions about previous innovations and experience



Discussion

Respondents in academia and the NHS exhibit low levels of experience of working in other sectors, hence their perceptions of other sectors are based on hearsay rather than fact. In comparison to industry respondents, both academic and NHS respondents viewed industry negatively and significantly differently from their industry counterparts. Pre-conceived notions of a sector and mistrust will inhibit the development of collaborative relations, which are essential to efficacious innovation adoption. These issues underline that a structural response to facilitating speedier innovation adoption, such as the establishment of Academic Health Science Networks may be insufficient without active attempts to improve collaborative relationships. Cross sectoral project teams; work placements in other sectors and promoting individuals with broad work experience may influence positive collaboration. Further research is necessary on a larger scale to ascertain the validity of our indicative findings.

Results

Demographic Background (Table 1):

The total sample size was 81.

Sector	Total Respondents (n)
All Three Sectors	81
Industry	28
Academia	27
NHS	26

Table 1 Total respondents (by sector)

Work Experience (Table 2):

Industry respondents had the most work experience and NHS respondents had the least experience working in all three sectors.

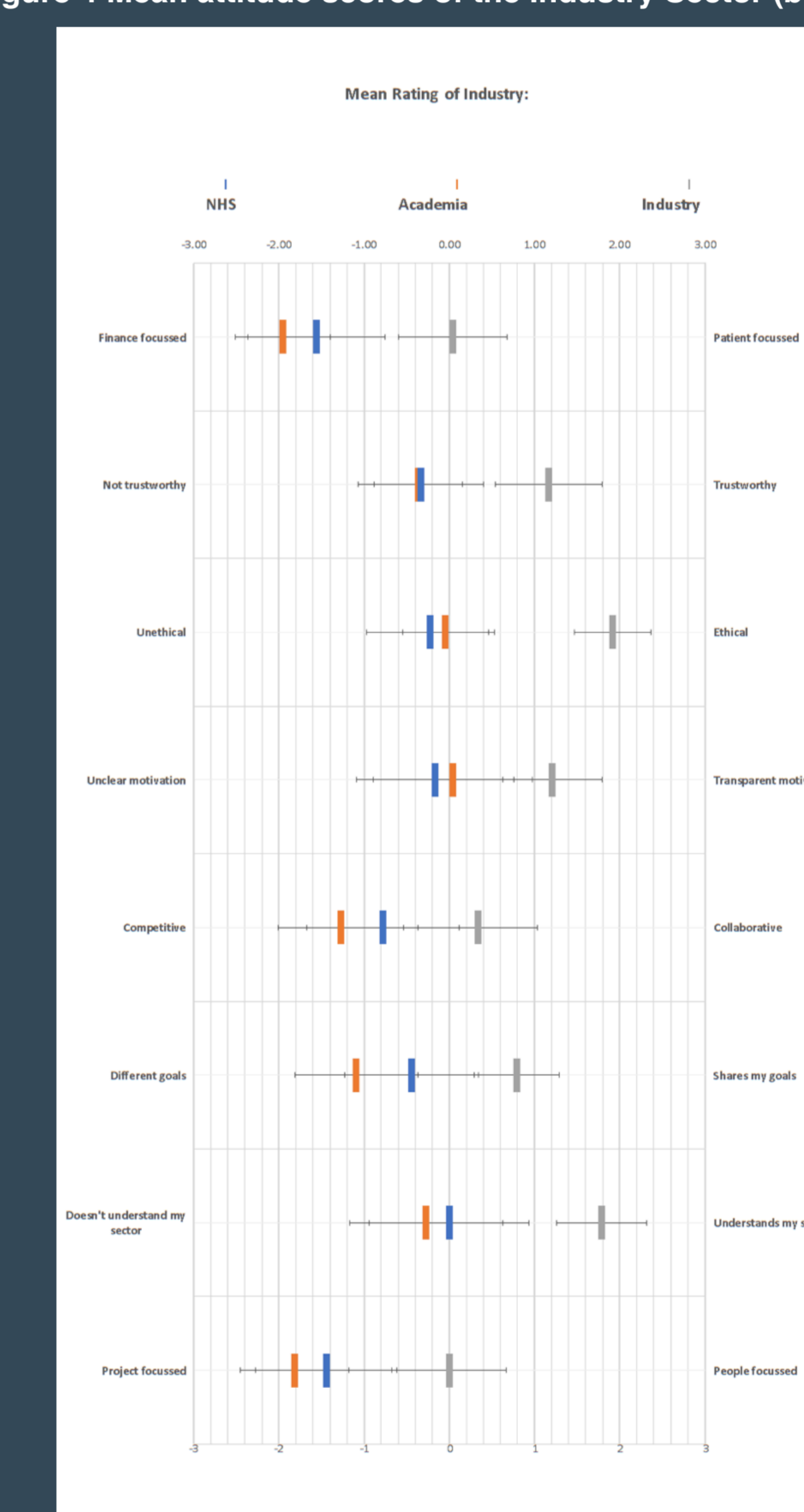
Previous work experience	Industry (n out of 28)	Academia (n out of 27)	NHS (n out of 26)
Primary Care	20	11	20
Acute Care	18	10	17
CCG	16	4	8
Academia	15	22	10
Small Company	15	2	2
Large Company	23	7	4
One or more sectors	24	19	11
All three sectors	13	5	3

Table 2 Previous work experience (by sector)

Sector Perception:

Trust was a major theme among the three sectors. All three sector respondents agreed mistrust of other sectors was a significant barrier to collaboration [Industry (n = 23, 88.4%); Academia (n = 12, 48%); NHS (n = 13, 54.2%)]. When respondents were asked to rate each sector on the following scales (Figure 4): not trustworthy – trustworthy, unethical – ethical, unclear motivation – transparent motivation, doesn't understand my sector – understands my sector, academia and NHS respondents rated the industry sector as leaning toward not trustworthy ($p = .004, .005$, respectively), unethical ($p = < .001$ for both), unclear motivation ($p = .058, .005$ respectively) and doesn't understand my sector ($p = .005, .001$, respectively) when compared to industry respondents (leaning toward trustworthy, ethical, transparent motivation and understands my sector).

Figure 4 Mean attitude scores of the Industry Sector (by sector)



Collaboration Experience:

Industry had the **highest percentage of collaboration experience** outside of their own sector. NHS had the **lowest percentage of collaboration experience** outside of their own Sector (Figures 1, 2 and 3).

Figure 1 Industry – Collaboration Experience

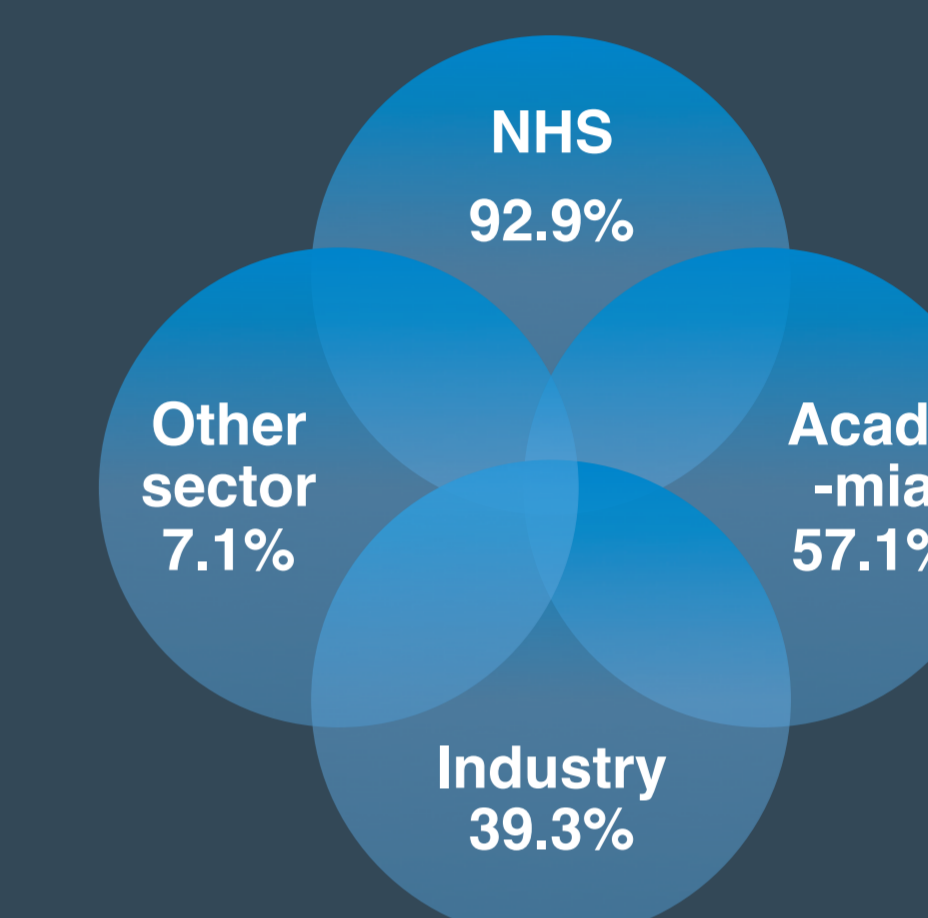


Figure 2 NHS – Collaboration Experience

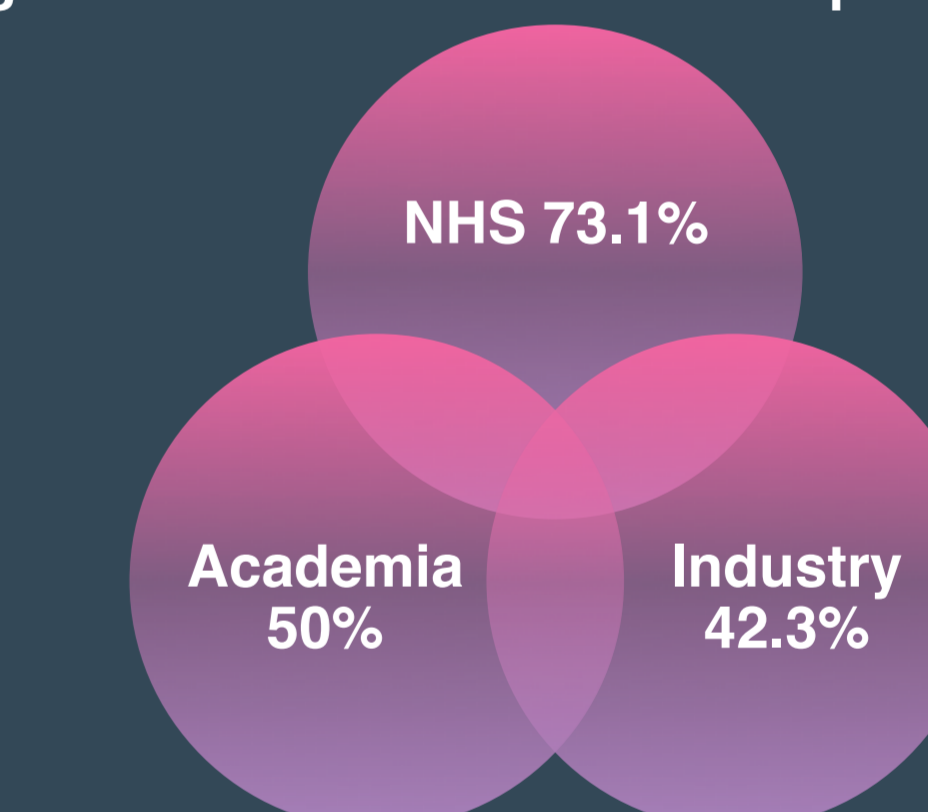
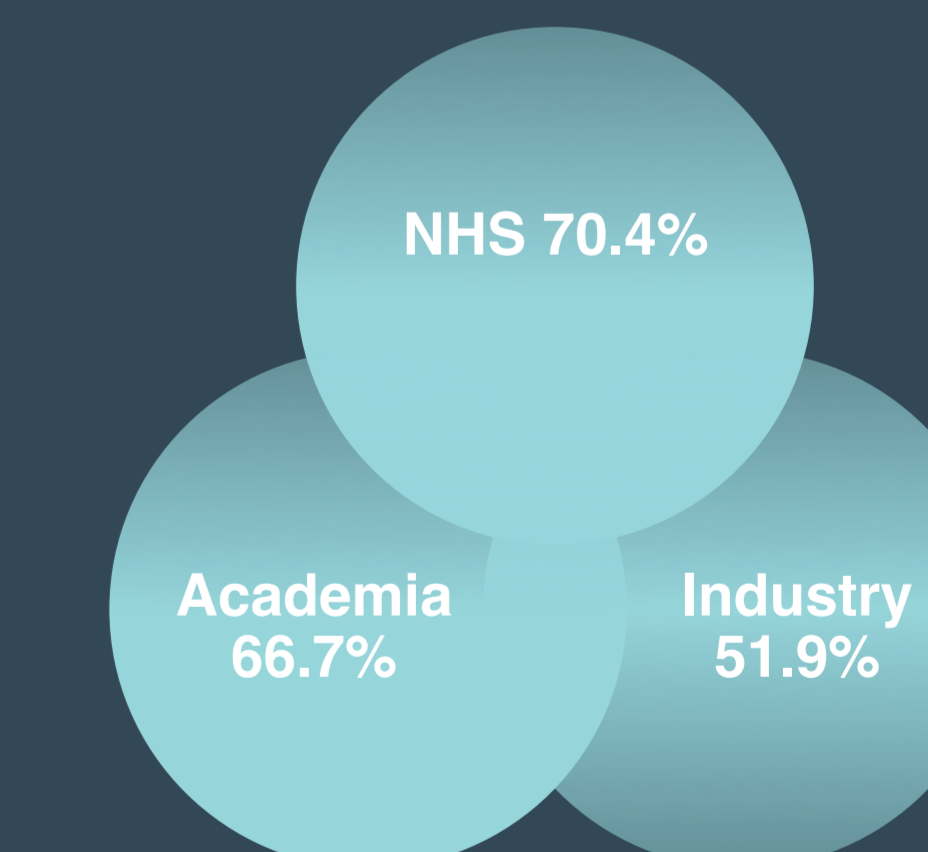


Figure 3 Academia – Collaboration Experience



Acknowledgements

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Llewellyn S, Procter R, Harvey G, Maniatopoulos G, Boyd A. Facilitating technology adoption in the NHS: negotiating the organisational and policy context—a qualitative study. Health Services and Delivery Research, No.2.23 2014.