

# Functional communication recovery in aphasia: realising opportunities for enriching the communicative environment

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The NHS working in partnership with education:  
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South Norfolk CCG | Norfolk Community Health & Care NHS Trust

# Conflicts of interest

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- Horton and Lane received funding from the UK National Institute for Health Research, Research for Patient Benefit (RfPB) programme: **SCIP-R study** (ref: PB-PG-0609-17264)
- Shiggins received funding through a University of East Anglia, UK PhD studentship: **OASIS study**

*The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health or the University of East Anglia*

# Background

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- Recovery from stroke is enhanced by exposure to enriched environments and practice (Kleim & Jones, 2008; Levin, 2011; Lohse et al., 2014)
- People with aphasia (PWA) after stroke need to practice language in everyday situations to optimise recovery of communication function
- Risk of learned non-use is high for PWA (Hersh et al., 2016; Byng et al., 2003)
  - People with moderate-severe aphasia particularly vulnerable

# Research questions

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- In the course of routine rehabilitation for PWA what are the opportunities for enhancing functional communication practice?
  - What do these look like?
  - How do these arise?
  - How are they realised or not?
  - Are there time costs or other resource implications?

# Methods: data from two studies

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Study	Data collection	
	Video	Interview / focus group
Early Supported Discharge (OASIS)	HCPs n=21: OT=5; PT= 4; RA=6; Nurse=3; AP=2 PWA n=10: severe=4; moderate=2; mild=4 (33.5 hours observation)	HCPs n=8: OT=1; PT=1; RA=2; AP=3; Nurse=1 PWA n=9: severe=3; moderate=2; mild=4  (Interviews: 15 - 70 minutes)
In-patient (SCIP-R)	HCPs n=8: OT=1; PT=2; SLT=1; Nurse=1; AP=2; NCA=1 PWA n=6: severe=3; moderate=3 (1.2 hours observation)	HCPs n=11: OT=1; PT=2; Nurse=2; HCA=4; AP=1; NCA=1

- Staff completed a 'learning log' to record any changes to usual time taken for activities with PWA (SCIP-R only)

# Methods: data analysis

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SCIP-R

- Interviews / focus groups: thematic analysis
- Video: conversation analysis (CA)

OASIS

- Videos viewed: topic guide developed
- Interviews: thematic analysis
- Focused video analysis (CA)

# Video data analysis

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- **Particular focus on**
  - **Ecology of the setting:** people involved; spaces; objects; activity focus
  - **Interaction:** turn-taking sequences; discourses (talk and non-verbal communication)

# Findings: illustrative example

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In-patient  
drug rounds



Nurse: ...and your provostatin ((pointing to tablets))

Joan: oh er I can't...

Nurse: what's it for?

Joan: no, prova-? statin?

Nurse: that's for your cholesterol

Joan: oh, right

- Initiations (e.g., inquiries, offers) by aphasic patients with moderate-to-severe impairments may cause lengthy repair sequences
- Busy staff may try to avoid this, or use strategies to close down the inquiry/offer
- Staff may capitalise on objects in the immediate environment, fragments of talk or gesture by the PWA



# Findings: illustrative example

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**AP:** so we're going to finish with one more activity...OK can you tell me the most embarrassing moment you've had in your lifetime

**John:** ooh as a kid....I don't know... I don't know

**AP:** what about holidays?

**John:** erm I don't know...

- Opportunities for 'natural conversation' arose during routine rehabilitation. These opportunities were inconsistently realised, in favour of rehabilitation 'tasks'
- Attempts to elicit 'natural' conversation, as a rehabilitation task, were often met with confusion as they were not personalised / not salient
- The home based environment provided 'springboards & scaffolds' for conversation & rapport building

# Findings (cont.)

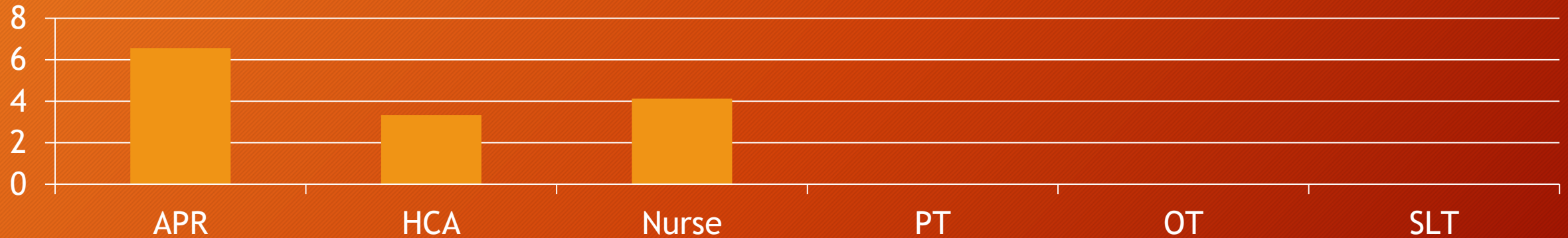
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- Interviews suggested that barriers to realising these opportunities may arise from
  - Time constraints
    - Increased risk of ‘learned non-use’ and social isolation for people with moderate-severe aphasia
  - Noisy in-patient environments
  - A lack of HCP training and low confidence in working with PWA

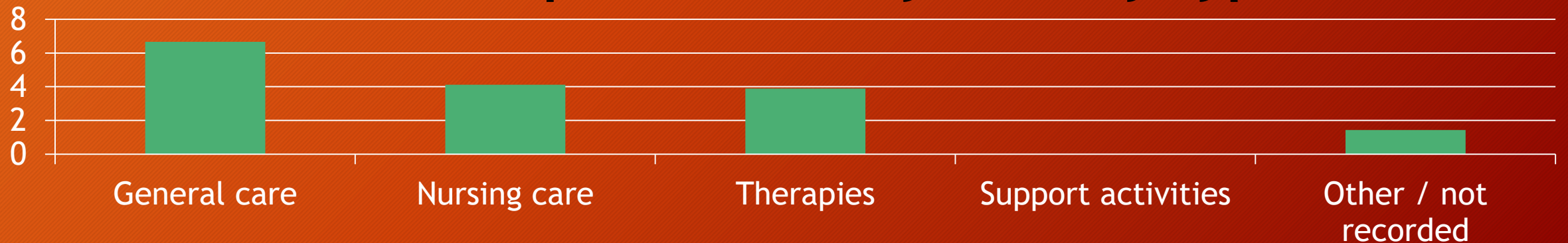
# In-patient: time costs

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## Added time per session by HCP type



## Added time per session by activity type



# Conclusions

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- Rich use of interactional strategies and resources by HCPs and PWA
- A focus by staff on the business in hand and getting the work done
  - Lack of flexibility, and control of the agenda by HCPs were barriers to practice opportunities
- Opportunities to produce stimulating environments for functional communication practice
  - Can be realised during routine rehabilitation
  - There are staff time cost and training implications

# References

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