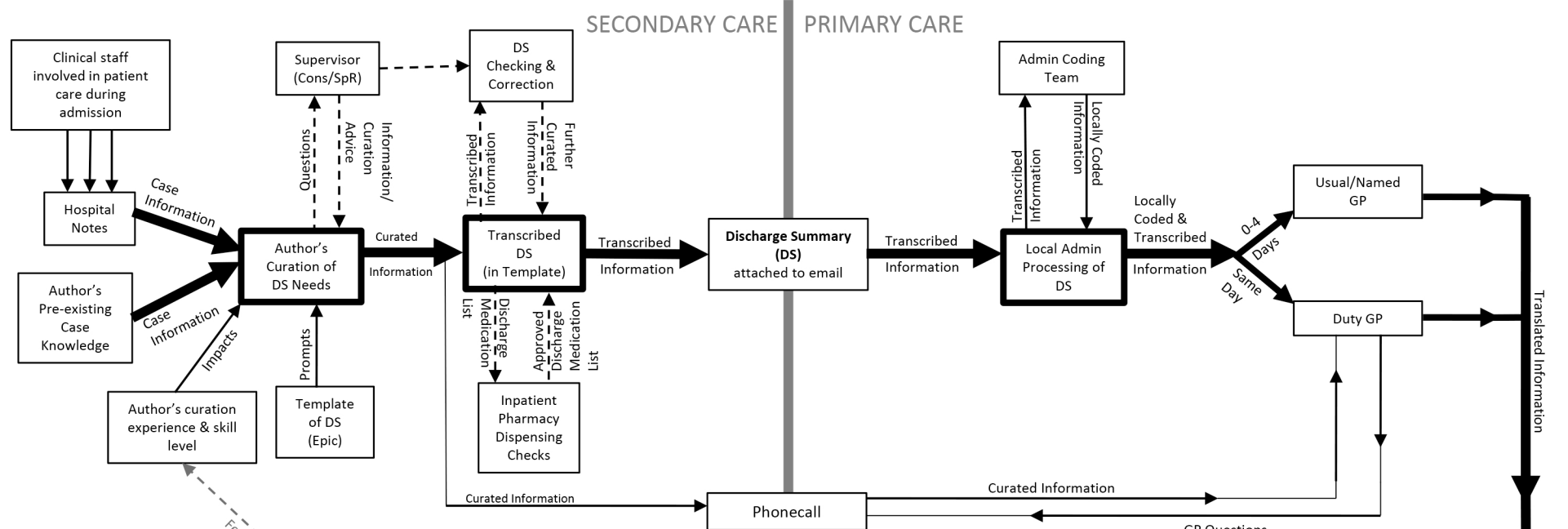**Figure 1.** A systems approach framed as an iterative series of questions.

B = people perspective. G = systems perspective. R = design perspective. O = risk perspective. P = systems approach 'project questions'.
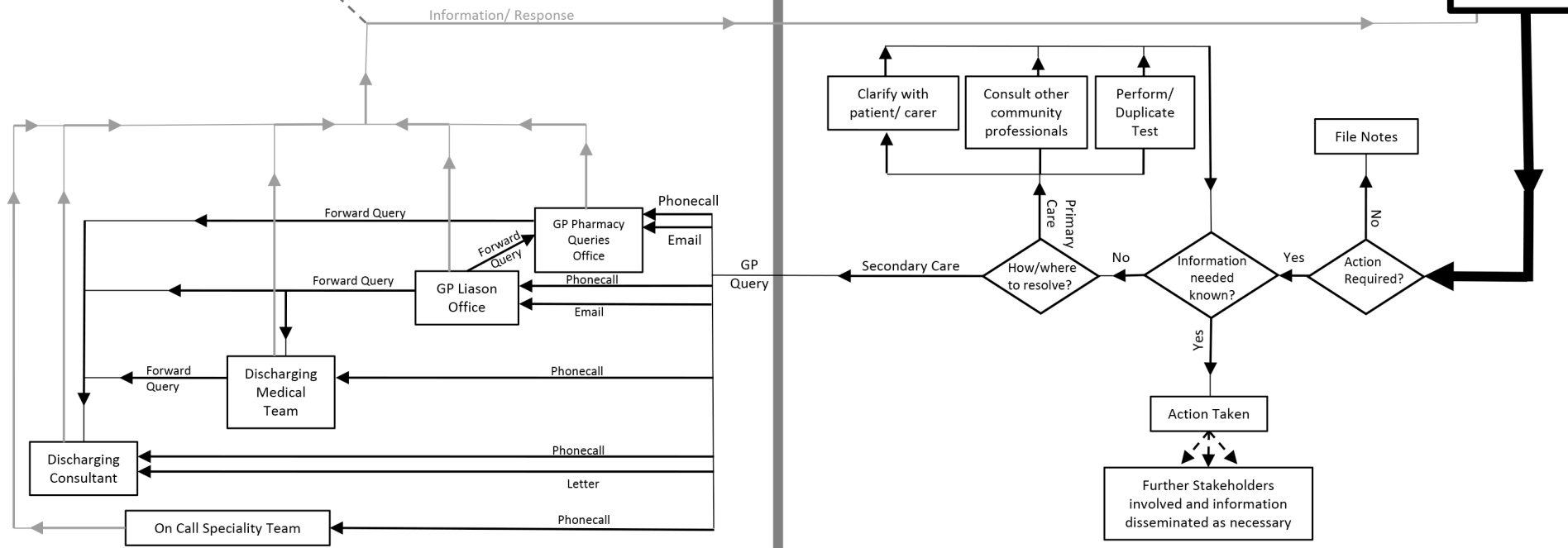
SECONDARY CARE | PRIMARY CARE

CREATION

Clinical staff involved in patient care during admission

Supervisor (Cons/SpR)

DS Checking & Correction

Admin Coding Team

Hospital Notes

Questions

Advice

Information/ Curation

Information/ Curation

Transcribed Information

Further Curated Information

Transcribed Information

Locally Coded Information

Usual/Named GP

Case Information

Author's Curation of DS Needs

Curated Information

Transcribed DS (in Template)

Transcribed Information

Discharge Summary (DS) attached to email

Transcribed Information

Local Admin Processing of DS

Locally Coded & Transcribed Information

0-4 Days

Author's Pre-existing Case Knowledge

Case Information

Impacts

Same Day

Duty GP

Author's curation experience & skill level

Prompts

Template of DS (Epic)

Discharge Medication List

Approved Discharge Medication List

Translated Information

Inpatient Pharmacy Dispensing Checks

Curated Information

Phonecall

Curated Information

GP Questions

CREATION

Feedback?

RESOLUTION

RECEPTION

GP Understanding of Situation

INTERPRETATION & ACTION

Information/ Response

Clarify with patient/ carer

Consult other community professionals

Perform/ Duplicate Test

File Notes

Forward Query

Phonecall

GP Pharmacy Queries Office

Email

Primary Care

Forward Query

Forward Query

GP Liason Office

Phonecall

GP Query

Secondary Care

How/where to resolve?

No

Information needed known?

Yes

Action Required?

No

Email

Forward Query

Phonecall

Discharging Medical Team

Phonecall

Yes

Action Taken

Discharging Consultant

Phonecall

Letter

Further Stakeholders involved and information disseminated as necessary

On Call Speciality Team

Phonecall

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1. The *Creation* of the message in the hospital: assimilation, and curation of the discharge summary, with the option for a supplementary telephone call to the GP.

2. The *Reception* of the message: uploading and coding the information and forwarding to the relevant GP.

3. As the GP gains understanding by *Interpretation* of the message, they may personally take or delegate *Action*. Missing information issues can be tackled within the primary care remit.

4. *Resolution* of an informational deficit can be undertaken via secondary care, either directly to clinicians via phone or email, indirectly via the team's speciality 'on call doctor' or the GP liaison office, or using the GP pharmacy queries service. There is potential for feedback to reach the original author.

Information Elements

Summarise Clinical Journey surrounding admission
List related diagnoses
Summarise relevant Investigations
Summarise treatments
Explain Rationale for diagnoses, investigations and treatments
Summarise patient understanding
Explain anticipated risks
List Discharge medications
Summarise state at discharge
List requests to GP
List planned follow up by secondary care

Secondary Purposes

To provide patient with written record of the situation
To inform the GP and add to GP Records
To delegate responsibilities
To facilitate specific further testing/ assessment/management
To facilitate informed and confident GP judgement on reassessment
To avoid unnecessary or duplicated testing/assessment
To act as a reference for future admissions

Primary Purposes

To facilitate continuity of patient care coordinated by the GP
To minimise Risks
To optimise use of clinician time

Meta Purpose

To optimise the standard of care provided to patient & population

- Junior Doctors:
    - Lack of knowledge and experience
    - Lack of system awareness
- Senior Doctors
    - Low 'Input level'
- Workload
- Culture
    - Devaluing attitudes to discharge communication
- Patient
    - Complexity
    - Admission length
- Discharge Summary Template

- Up to 4 day delay for letter to be read
- Variable GP availability for on the day phonecalls

OVERARCHING BARRIERS
- A lack of Team Mentality
- The "Divide" between Hospital and General Practice

BARRIERS TO MEETING SYSTEM NEEDS

CREATION

RECEPTION

RESOLUTION

INTERPRETATION & ACTION

- High time 'cost'
- Difficulty in accessing relevant clinician

- Lack of easy author feedback mechanism

- Information Format
    - Difficult to access key information within discharge summary template
- Information Content
    - Too much 'excess' information
    - Missing elements
- Information Clarity
    - Lack of explicitness
- Patient factors
    - High complexity, high safety risk
- High Workload