BJD
British Journal of Dermatology

Appropriate and inappropriate influences on outpatient discharge decision making in dermatology: a prospective qualitative study*

N.A. Harun,[1,2] A.Y. Finlay,[1] M.S. Salek[3] and V. Piguet[1]

[1]Department of Dermatology and Wound Healing, Institute of Infection and Immunity, School of Medicine, Cardiff University, 3rd Floor, Glamorgan House, Heath Park, Cardiff CF14 4XN, U.K.

[2]Department of Dermatology, University Malaya Medical Centre, Kuala Lumpur 50603, Malaysia

[3]School of Life and Medical Sciences, University of Hertfordshire, College Lane, Hatfield AL10 9AB, U.K.

Correspondence
Nur A. Harun.
E-mail: harunn@cardiff.ac.uk

Accepted for publication
22 May 2015

Funding sources
None.

Conflicts of interest
A.Y.F. is joint copyright owner of the Dermatology Life Quality Index (DLQI), mentioned in Table 2 and quotation 25 (Appendix S1; see Supporting Information). Income from the DLQI goes to Cardiff University.

*Plain language summary available online

DOI 10.1111/bjd.13946

Summary

Background Outpatient discharge decision making in dermatology is poorly understood.

Objective To identify the influences on clinicians' thought processes when making discharge decisions in dermatology outpatient clinics.

Methods Forty clinicians from 11 National Health Service Trusts in England were interviewed. The interviews were audiorecorded, transcribed, coded and thematically analysed.

Results The mean age of the clinicians was 48·8 years (range 33·0–67·0), 17 (43%) were men and 19 (48%) had > 20 years of clinical experience. One hundred and forty-eight influences were reported, with five main themes: (i) disease-based influences included type of diagnosis (100% of clinicians), guidelines (100%) and treatment needed (100%); (ii) clinician-based influences included the clinician's level of experience (100%), seniority (37%), emotional attitude (95%), 'gut feeling' (25%), personal attitude towards discharge (45%) and level of perception (100%); (iii) patient-based influences included patients' ability to cope with their disease (100%), wishes (70%), quality of life (32%), command of English (40%) and cultural background (25%); (iv) practice-based influences included good primary care (100%), secondary support structure (100%) and clinic capacity pressure (67%); (v) policy-based influences included pressure from hospital managers (57%) and an active discharge policy (7%). Fourteen (9%) influences were potentially inappropriate.

Conclusion This study has identified multiple factors influencing outpatient discharge decision making. This provides the basis for developing evidence-based training to improve discharge decision appropriateness.

What's already known about this topic?

- The process of discharging an outpatient is critical to organizing an efficient service.
- Both clinical and nonclinical factors influence outpatient discharge decision making.

What does this study add?

- There is a huge range of influences on clinicians during the process of discharging patients from outpatient clinics.
- Most influences are appropriate but some may be inappropriate.
- There is a need to train clinicians in how to make appropriate outpatient discharge decisions.

The outpatient discharge decision is a critical but neglected process.[1] Discharge decisions, marking the final stage of one episode of patient care, are taken as an integral part of clinical practice countless times daily in dermatology outpatient clinics, but deciding whether or not to discharge a patient is complex.[2–5] The decision plays a major role in determining the number of outpatient attendances, directly affecting the overall efficiency of outpatient clinical services.[5] In the U.K. National Health Service (NHS), everyone is registered with a general practitioner (GP). All care is free and doctors are salaried. A small percentage of patients choose to access health care privately for a fee, outside of the NHS. In order to be seen by a dermatologist, the GP needs to refer the patient to the dermatology service, usually based in the secondary care hospital. Lengthy waiting times for specialist care are a major concern under the NHS and some healthcare systems.[6,7] There is limited evidence concerning influences on discharge.[1] However, influences identified beyond diagnosis and disease severity include the clinician's personal attitude towards discharge, the patient's ability to make decisions, the availability of healthcare resources, ethical considerations, time pressures and decision biases.[1,3,8–13] The aim of this study was to investigate what the clinical and nonclinical influences are on outpatient discharge decisions. This is important because a better understanding may allow training to ensure improved appropriateness and greater consistency in making discharge decisions.

Materials and methods

Ethical approval was obtained from the South East Wales Local Research Ethics Committee and from each hospital's research and development department. This study was set within the NHS in England. All patients receive free treatment and so there is no system of reimbursement to patients. We purposively sampled 60 consultant dermatologists from 11 NHS hospital Trusts across England. Clinicians were chosen to represent a reasonable mix of consultants with both medical and surgical interests. We limited our inclusion criteria to only consultants rather than also including trainee dermatologists because consultant dermatologists have completed accredited training and are expected to have wide experience in clinical decision taking.

All consultants were initially invited to participate thorough post/e-mail and then met face-to-face with N.A.H. to discuss the protocol prior to the start of the study. Forty consultants gave written informed consent and were interviewed face-to-face by the same interviewer (N.A.H.). We used a semistructured interview checklist,[14] starting with the question 'Please tell me what are the factors that influence your discharge decision making in your outpatient practice' and used prompts such as 'Please tell me more about this?' to explore further. To allow participants to express views that may have been missed, a question such as 'Is there anything more you would like to add?' was asked at the end of the interview. Saturation (i.e. no more new themes generated) was reached during the 29th interview, and therefore it was not deemed necessary to interview more than 40 participants.

Data analysis

The interviews were transcribed, coded and analysed by N.A.H. using thematic analysis. The process of coding was initially conducted manually. It started by systematically extracting relevant items across the dataset. These items were then collated into potential subthemes and themes by writing each influence in the right-hand margin of each transcript. Ten per cent of interview transcripts were analysed separately by A.Y.F. or M.S.S. Codes extracted from each transcript were compared to check for consistency and validity of the analysis. Transcripts were further analysed by N.A.H. using NVivo 10 Qualitative Data Analysis Software (QSR International Pty Ltd, Melbourne, Vic., Australia) to aid with the organization of unstructured data. All duplications or similar items were reduced by removing or merging them under a common category. A final list of themes and subthemes was generated.

Results

Forty (67%) of 60 clinicians agreed to be interviewed (Table 1). Eleven (55%) of the 20 dermatologists who did not agree to take part in the study were from the South

Table 1 Demographic characteristics of the consultant dermatologists (n = 40)

Consultant dermatologists	
Male	17 (42)
Female	23 (57)
Mean age (years)	48·8
Indigenous British	32 (80)
Ethnic minority	8 (20)
Type of NHS contract	
Full time	32 (80)
Part time	8 (20)
Also working in private practice	28 (70)
Place of training	
England	36 (90)
Scotland	1 (2)
Wales	2 (5)
Overseas	1 (2)
Years of clinical experience in dermatology	
30–40	7 (17)
20–29	12 (30)
10–19	14 (35)
< 10	4 (10)
Number of clinical sessions per week	
≥ 10	5
5–9	31
< 5	4
Main special interest in dermatology	
Medical	20 (50)
Surgical	11 (27)
Paediatric	9 (22)

Data are n (%) unless otherwise indicated. NHS, National Health Service.

Table 2 Influences on clinicians' outpatient discharge decision-taking

Type of influence	N[a]	Percentage
Disease based		
1. Diagnosis	40	100
Type	40	100
Will discharge patients with simple basal cell carcinoma after completing surgery	4	10
Severity	21	52
Prefer to continue managing patients with severe skin diseases in the clinic	5	12
Chronicity	26	65
Disease progression	19	47
Will discharge if patient cured	19	47
Will discharge if disease stabilizes	16	40
Will not discharge if disease is recurring	15	37
Complexity	25	62
Certainty of diagnosis	19	47
Certainty of prognosis	3	7
Comorbidities	13	32
2. Disease guidelines	40	100
Not strictly using guidelines	5	12
3. Disease can be managed at GP level	27	67
4. Treatment	40	100
Availability of a good treatment plan	21	52
Type of treatment needed	40	100
Treatment requiring continuous monitoring e.g. phototherapy	4	10
Treatment requiring systemic medication	40	100
Availability of treatment in secondary care	28	70
Discharge if no further treatment can be available in hospital	15	37
Discharge if one has no expertise to treat patent any longer	15	37
5. Response to treatment	30	75
Appropriate treatment	7	17
Completed treatment	23	57
Clinician based		
1. Demographics	15	37
Gender	1	2
Seniority	15	37
Personal beliefs	4	10
2. Experience	40	100
Personal	7	17
Clinical	40	100
3. Awareness of healthcare issues	11	27
Limited healthcare budget	8	20
Long patient waiting list	11	27
Difficulties in taking over a retired colleague's patients' list	3	7
Political healthcare issues	3	7
4. Emotion	38	95
Feeling confident		
Confidence in one's judgement and decision making	17	42
Confidence in one's negotiating ability	14	35
Confidence in patients to cope with their skin disease	15	37
Confidence and trust in GP to handle the patients	21	52
Confidence in nurses to manage patient in primary care	4	10
Confidence in carer's management capabilities	5	12
Feeling morally responsible		
Concerned over vulnerable patients	9	22
Empathy towards patients	19	47
Feeling pressured		
Pressured by 'difficult' or demanding patients	10	25
Threatened by an aggressive patient and discharged the patient	2	5
Pressured by hospital managers	23	57

(continued)

Table 2 (continued)

Type of influence	N[a]	Percentage
Pressured by hospital managers who gave precedence to seeing more new patients	10	25
Do not discharge more patients even though they feel pressured	6	15
Pressured by those paying for healthcare (payers)	5	12
5. Gut feeling	10	25
6. Perception	40	100
Self		
Coordinator of patient care	4	10
Provider of psychological support	10	25
View one's expertise as a reason for continuing care	9	22
One is able to negotiate and communicate well with the patient	23	57
Patient		
Gauge patients ability to cope with managing the disease	13	32
Less likely to discharge if patient is perceived as a litigious person	3	7
Primary care services		
Assessed GP's clinical competency	23	57
Assessed GP's willingness to share care from the referral letters	5	12
Discharge if there is good patient-GP relationship	14	35
Discharge if there is good family support	10	25
The nurses' competency in primary care such as wound dressing	6	15
Hospital managers		
Hospital managers want consultants to discharge more patients	13	32
Perception that hospital managers advocate discharge for financial gain	6	15
7. Awareness of attitude influencing discharge	18	45
Pragmatic	5	12
Aggressive	4	10
Soft touch	2	5
Utilitarian	7	17
8. Duration and level of patient relationship	21	52
9.Academic interest	10	25
Patient based		
1. Demographics	22	55
Age	22	55
Gender	1	2·5
Culture	11	27
English language proficiency	16	40
Mobility	13	32
Distance	17	42
Moving to another area	3	7
Education	10	25
Education level	10	25
Intelligence, sensible	9	2
2. Nature of job	5	12
3. Circumstances surrounding the patient's life	16	40
4. Patient's quality of life	13	32
Uses DLQI as a guidance to discharge	4	10
5. Presence of a carer	22	55
Carer or family member with who supports the patient	22	55
Importance of confirming parents' capability to monitor children	5	12
Importance of being vigilant for a difficult parent-child relationship	2	5
Carer who will reaccess care	3	7
Carer's concerns	9	22
6. Cognitive ability	11	27
7. Learning difficulties	2	5
8. Psychological mindset	16	40
9. Attitude towards disease	40	100
Patient understanding of their disease	19	47
Patient's acceptance their disease	6	15

(continued)

Table 2 (continued)

Type of influence	N[a]	Percentage
Patient's ability to cope with managing their own disease	40	100
Patient's ability to apply, take or step up medication accordingly	16	40
Patient's compliance with his medication	9	22
Patient's reliability in monitoring disease progression	12	30
Patient's initiative to seek assistance from GP, primary care or hospital if needed	14	35
Patient's engagement with support groups after discharge	3	7
10. Patients behaviour towards clinician	28	70
Patient appears anxious	9	22
Demanding and 'difficult'	10	25
Patient appears aggressive and violent	5	12
Patient appear dependent and helpless behaviour	4	10
11. Patients' wishes	28	70
Will consider patients' wishes to be discharged if disease is manageable	16	40
Managing patients' expectations	12	30
Practice based		
1. Secondary care services	40	100
Practice which is skewed to more chronic or complex diseases	9	22
Practice which has well-staffed expertise support, such as psychologists, oncologists	11	27
A service which has locums assisting dermatologists	6	15
A service which allows easy re-access to secondary care	22	55
A service where GPs work alongside dermatologists	5	12
A service with good interpreter services	6	15
A service which allows a 6-12 month easy re-access to secondary care if discharged	19	47
Clinic consultation time constraints	13	32
Patient number pressure on clinic capacity	27	67
Healthcare budget constraints in own Trust	3	7
2. Primary care services	40	100
Knowledge of the GP	13	32
GP's knowledge, experience and skills	27	67
Type of GP practice which has the medication prescribed by consultant, drug monitoring or nursing assistance	19	47
Community nurses for wound care	17	42
Support groups	7	17
Advocates	1	2
Pharmacists	1	2
Policy based		
Aggressive clinic discharge policy	3	7
Nurse led management of skin disease	5	12
Local health policies influenced by political policies	1	2

N[a] = number of consultants who mentioned this influence in their interviews.

West, six (30%) from the Midlands and three (15%) from the South East of England. The mean interview time was 55 min (range 15–80). The 148 different influences identified were divided into five categories (Table 2). Several influences were identified that were inappropriate: 'inappropriate' influences were defined as those that do not relate to the patient or their needs, or which might bias the clinician towards not giving the highest standard of care (Table 3). For example, patient care may be compromised by the clinician's personal interest, implementation of hospital healthcare policies or by poor primary care support. Influences either encouraged or discouraged clinicians to discharge patients (Table 4). Twenty-two (55%) clinicians mentioned that discharge decision taking is an important consultation skill. Interview quotes are given in Appendix S1 (see Supporting Information). This study was set within the NHS in England. All patients receive free treatment and so there is no system of reimbursement to patients.

Disease-based influences

Diagnosis

All 40 clinicians reported that the diagnostic type influenced their discharge decisions. One used different discharge criteria for medical and surgical patients, considering the risk of tumour recurrences for surgical patients (quotation 1). Patients with skin cancers having a higher risk of recurrence

Table 3 Inappropriate influences on discharge decision making

Intuition or personal beliefs without correct information available
Language difficulties
Noncompliance to follow-up appointments or medication
'Difficult' or demanding patients
Threats by an aggressive patient
Pressure from hospital managers to see more new patients
Pressure from the payers
Healthcare budget constraints in local Trust
GP's unwillingness to share care, based on referral letters
GP's incompetency, from the patient's perspective
Clinic consultation time constraints
Knowing the patient well and for a long time
Likelihood of patient being litigious
Personal academic interest

GP, general practitioner.

were more likely to be followed up (quotation 2). Patients on topical treatments were discharged more readily than those on systemic treatments unless shared care was possible with GPs (quotation 3). Patients with complex genetic problems may never be discharged (quotation 4). Being certain about diagnosis before discharge was reported by 19 (47%) clinicians (quotation 5).

Clinical guidelines

Thirty-five (87%) clinicians relied on local or national guidelines (quotation 6), giving them a sense of security that discharge was appropriate. Surgical guidelines for skin cancer may suggest the appropriate length of follow-up. However, discharge guidance is often omitted from medical guidelines. Five (12%) senior clinicians preferred to rely on clinical experience and did not closely follow guidelines (quotation 7). The clinicians who had clinical experience before the advent of guidelines were the most sceptical about the relevance of these guidelines.

Diseases manageable in primary care

Twenty-seven (67%) clinicians mentioned the ability of treating a disease at primary care level as an influence. If resources in primary care are insufficient the patient may remain in secondary care.

Treatment

Twenty-one (52%) clinicians mentioned that a well-structured treatment plan prior to discharge is critical (quotation 8). Five (12%) clinicians preferred to continue managing patients with severe diseases, leading to delayed discharges. Thirty (75%) clinicians wanted to witness treatment response or completion before discharge (quotation 9). Some patients may be discharged if no further treatment is considered helpful, despite disease progression (quotation 10).

Clinician-based influences

Sex

One clinician reported that some female patients, especially those with genital problems, refused to be discharged because they felt uncomfortable being examined by a male GP (quotation 11).

Seniority

Fifteen (37%) clinicians stated that junior clinicians are risk averse when discharging and prefer to follow-up patients for educational or academic reasons (quotations 12 and 13).

Knowledge and experience

All clinicians stated that prior experience of managing specific diseases is crucial to timely discharge (quotation 14). Confidence in discharging improved as they gained experience. One clinician's experience as a junior discharging 'difficult' patients resulted in her now being risk averse.

Awareness of healthcare constraints

One clinician highlighted that the limited healthcare budget compels clinicians to adopt an aggressive discharge policy (quotation 15). Despite awareness that many patients were awaiting appointments, clinicians still found discharging patients difficult. Clinics become filled with a skewed case mix of complex patients needing indefinite review. New patients were much easier to discharge. Three (7%) clinicians had difficulty in discharging patients they 'inherited' after a colleague retired. Discharging these patients required building up confidence within the new patient–clinician relationship.

Emotions

Emotions can influence discharge decisions. Nineteen (47%) clinicians considered themselves to have empathic understanding with their patients and felt the need to give psychological support. Ten clinicians (25%) stated they had been pressured by the demanding, rude or irritating behaviour of patients upon discharge (quotation 16). Two (5%) felt threatened by an aggressive patient who insisted on follow-up but who was discharged. One clinician would discharge patients he perceived as 'malingerers', provided there were no clinical issues (quotation 17). However, another felt that patients who insisted on follow-up may not get discharged compared with those who are acquiescent; also, if the clinician liked the patient, discharge was less likely. Most clinicians were cautious and gave a longer follow-up appointment to patients who insisted on follow-up. Ten clinicians (25%) expressed frustration when hospital managers gave precedence to seeing more new patients rather than following-up existing ones. Six (15%) stated that they do not discharge more patients, despite feeling pressured by hospital policies.

Table 4 Influences that encourage or discourage discharge in outpatient clinics

Factors	Encouraging earlier discharge	Encouraging delayed discharge
Disease	Simple, benign diseases	Complex, chronic, malignant diseases
	Improving, stable or cured	Recurrent and severe
	Topical medication	Systemic medication
	Good treatment response	Poor treatment response
	Completed treatment	Ongoing treatment needing monitoring
	Certainty of diagnosis and prognosis	Unconfirmed or uncertain of diagnosis
	Clear and effective treatment plan	Indecisive treatment plans with ongoing investigations
	Disease manageable at primary care level	Disease needing expertise care in secondary care
	Referred for diagnosis	Referred for treatment and management
Clinician	More experienced, senior consultant	Less experienced, junior colleague
	Good knowledge of GP and primary care support	Lack of knowledge of the GP and primary care support
	Having trust and confidence in GP	Lack of trust and confidence in GP
	Pragmatic and keen attitude towards discharge	Empathetic and softer feelings for patients' who demand follow-up
	Consulting new patients	Consulting patients with close clinician–patient relationships
	Confident with own judgement and communication skills	Overly cautious and risk averse towards discharge
	Excellent clinician–patient communication	Poor communication due to language barriers
Patient	Middle-aged with busy job/lifestyle	Extremes of age: very young or very old
	Similar cultural backgrounds	Different cultural backgrounds
	Intelligent and well informed	Blindness, learning difficulties and cognitively disabled
	Reasonable expectations and sensible	Unrealistic expectations and malingerers
	Empowered patient to manage disease appropriately	Vulnerable, dependent patient
	Good understanding and acceptance of disease	Refusal or poor acceptance and understanding of disease
	Ability to monitor disease recurrence	Inability to cope or difficulty in coping with disease
	Rude, aggressive and violent patients	Insistent, vulnerable and 'needy' patients
	Good carer or family support and relationships	Poor carer or family support and relationships
	Patients who are well informed and sensible	Patient who has unrealistic beliefs and expectations
	Patient who are nursing home-bound with transport difficulties	Patients who are fit to travel for appointments
	Patient's wishes to be discharged	Patient's wishes to be followed up
Practice	No expertise or further treatment available in secondary care	Availability of disease expertise for complex skin diseases
	Frequent multidisciplinary meetings for complicated cases	Lack of team work and discussion on complicated cases
	Consultant availability advocating proactive management discussions during clinic sessions	Shortage of consultants for teaching practice during clinic sessions
	Presence of good specialist nurse-led clinics in secondary care	None or lack of specialist nursing support in secondary care
	Presence of psychologists/counsellors in patient management team	Absence or lack of psychologists/counsellors
	Skilful, willing and reputable GPs	GP with lesser dermatological skills, experience and poor GP–patient relationships
	GP practice that has nursing care such as for wound dressing	Absent nursing support for specific dermatology diseases
	Service with easy patient re-access to secondary care	Service with poor or difficult patient re-access to secondary care
	Having an interpreter in the clinic	No interpreter support
Policy	A clear and aggressive discharge policy	No clear guidelines on how to discharge patients
	Hospital policies targeting new patients rather than follow-up patients	No reasonable targets regarding patient discharge

GP, general practitioner.

Medical intuition or 'gut feelings'

Ten (25%) clinicians stated they relied on intuition and would not discharge patients if there were treatment adherence or home support difficulties (quotation 18).

Personal attitude to discharge

Two male and two female clinicians (10%) viewed themselves as keen or 'aggressive' dischargers. While trying to help patients understand the reason for discharge, they attempted to accommodate patients to avoid confrontation. Two (5%) clinicians admitted to being a 'soft touch' for some patients and would not discharge them (quotation 19). Seven (17%) clinicians took a more utilitarian approach, taking into account other patients' waiting time and healthcare costs (quotation 20).

Perceptions

Four clinicians (10%) perceived themselves as the main coordinator of patient care and were less likely to discharge their patients. Thirteen (32%) clinicians gauged patients' ability to

monitor themselves prior to considering discharge. Fourteen (35%) clinicians were more likely to discharge patients confidently if they perceived that the patients had a close relationship with their GPs. Similarly, 10 (25%) clinicians were more likely to discharge patients they perceived as having strong family support. Three (7%) were less likely to discharge patients if they perceived them as being litigious.

Duration and level of patient–clinician relationship

Twenty-one (52%) clinicians were more likely to agree to patients' wishes to stay in secondary care if they had an 'understanding' relationship with them (quotation 21).

Academic interest

Seven (17%) clinicians mentioned following-up patients for personal academic interest and three (7%) for student teaching.

Patient-based influences

Demographics

Whether a patient has an organized, sensible approach to their disease is more important than their age (quotation 22). Patients on a low income living far from the clinic or who have moved to another area are likely to be discharged. Communication is easier with patients of similar cultural background to the doctor, which facilitates discharge. Five (12%) clinicians more readily discharge patients with high job demands (quotation 23).

Quality of life

Some clinicians felt strongly about the importance of considering the patient's quality of life (n = 13; 32%) and psychological state (n = 16; 40%) before discharging them (quotation 24). Four (10%) used standard questionnaires to measure quality of life to inform discharge decisions (quotation 25).

Ability to cope with their disease

All clinicians stated the importance of considering whether a patient has a good understanding of their disease and could manage it appropriately if discharged (quotation 26). Twenty-two (55%) mentioned that patients' ease of access back to secondary care is critical. Concerning the discharge of children, five (12%) clinicians felt it important to ensure that the parents were competent to monitor their children's skin disease and able to access help if needed.

Wishes

Sixteen (40%) clinicians would agree to patients' wishes to be discharged, provided the disease was mild or manageable in primary care. However, one clinician might discharge patients with active skin disease upon request. Twelve (30%) emphasized the importance of managing patients' expectations over more than one consultation prior to discharge (quotation 27).

Carer support

Twenty-two (55%) clinicians mentioned that the presence of a carer facilitates discharge. Two (5%) stated they would be vigilant for a difficult parent–child relationship that might indicate subtle childcare problems, influencing against discharge.

Practice-based influences

Secondary care service

Nineteen (47%) clinicians highlighted that a well-staffed and well-equipped dermatology service can facilitate earlier discharge, as complex treatment can be carried out in the same setting. Patients are more likely to be discharged if there is good access back to secondary care (quotation 28). Clinicians from nine departments felt their interpreter services were good, making discharge easier.

Time constraint within clinic

Thirteen (32%) clinicians mentioned that lack of consultation time indirectly influenced against discharge. Patients may need another appointment to address all their concerns.

Primary care service

Twenty-seven (67%) clinicians reported that their understanding of a GP's knowledge and experience in managing dermatology patients is extremely important (quotation 29). Thirteen (32%) clinicians felt more confident discharging to GPs known to them. Twenty-three (57%) clinicians assessed a GP's clinical competence, and five (12%) their willingness to share care from the referral letter and from a patient's attitude towards their GP. Seventeen (42%) clinicians felt that discharge was more likely if community nurses were available to assist in wound care. Seven (17%) clinicians found it easier to discharge patients if there was a suitable local patient support group.

Policy-based influences

Different clinic service models are used. Three clinics adopted a strict discharge policy (quotation 30). Five clinics encouraged nurse-led management, including patient education on skin disease management, to facilitate early discharge. One clinician believed that hospital managers deliberately ignore the difficulties faced by clinicians in managing patients (quotation 31).

Discussion

This study has demonstrated that many factors influence clinicians when making discharge decisions,[1] consciously or

subconsciously.[15] Clearly, not all influences on clinicians are necessarily appropriate. Methods should be considered to ensure decisions are made in the most appropriate manner. Attempts to alter discharge decision behaviour will only succeed if the influences revealed by this study are addressed. Discharge decision making might be made more appropriate by specific training, creating a strategy to 'circumvent' influences perceived as leading to inappropriate discharge.

The decision to discharge an inpatient from hospital is different from the decision to discharge from outpatient clinics. The high cost of inpatient care has encouraged protocol development to improve inpatient discharge,[16,17] but the financial implications of inappropriately timed outpatient discharge decisions have received little attention. In the U.K. there are no specific 'rules' for discharge: clinicians are assumed to discharge patients when they think it appropriate. In some specific situations there may be guidance available, for example in management guidelines concerning skin cancer.[18] There are no published evidence-based strategies on how to discharge a dermatology outpatient. This is not only important in specialties with high outpatient attendances such as dermatology, ophthalmology and otolaryngology, but also in other relevant specialties. 'Medical' dermatologists find it difficult to discharge patients with chronic skin problems, whereas protocol-driven 'surgical' dermatologists may discharge based on tumour guidelines. Most U.K. clinical guidelines in dermatology do not specifically advise on criteria for outpatient discharge.[19] The finding that 87% clinicians in some situations found discharge guidance reassuring suggests that this issue should be addressed routinely when guidelines are formulated. However, some clinicians felt that their wealth of clinical experience overrode the need to follow guidelines strictly and so these physicians would be less likely to benefit from additional guideline decision support.

Clinicians may make biased discharge decisions while believing them appropriate and unprejudiced.[1,13] Even though clinicians admit to their differing attitudes towards discharge, they have limited awareness of how their personality affects their thinking. Personality and emotion may override rational judgement and foster bias. A few clinicians admitted that their 'soft' personalities allowed long-standing patients to overrule their decision to discharge. A few clinicians said they strongly wished to discharge patients who behaved threateningly. However justified, this requires careful handling and documentation.[20] Most clinicians felt confident of their discharge decision making and were unaware of possible biases, such as overconfidence.[21] Data were not available on whether the actual rates of discharge of individual clinicians matched their perception. A clinician's interpersonal awareness and proficiency in verbal and nonverbal communication is critical to effective healthcare.[22] A reassuring demeanour and the right choice of words can allay a patient's fear of feeling abandoned. Clinicians' gut feelings may arise from 'skilled intuition' acquired from years of clinical experience.[23] Clinicians may subconsciously perceive a patient's discharge readiness based on their 'gut feeling' concerning the patient's family dynamics and support.

The 'art of accurate perception' is of great importance.[24] A slipshod GP referral letter that gives an (unwarranted) impression of GP incompetency, a perceived poor patient–GP relationship or an incorrect perception of a GP's unwillingness to share patient care may all lead to unnecessary follow-up. Clinicians may be trapped in an anchoring bias when making discharge decisions, by giving disproportionate weightage to the initial information received in a GP's referral letter or first impressions of a patient's attitude. Clinicians are influenced by both 'expected' and 'immediate' emotions.[25] Emotional cues focus attention on important information,[26] the initiation and the making of appropriate decisions.[27] 'Immediate' emotions, such as feeling pressured to meet healthcare demands, are also experienced when making discharge decisions.[25] Clinicians may be unaware of how this affects their prioritization of information and decision making[25]: a clinician might agree to follow-up an apparently 'needy' patient even though initially planning discharge.

Ideally, clinicians should be certain of the facts informing their discharge decision making rather than making assumptions. In an ideal world, a patient appointment jointly with the dermatologist and the GP at the time of discharge would allow maximal understanding over continuity of patient care. There are some dermatology services where a GP with a special interest in dermatology has clinics jointly with the dermatologist, but this is the exception. Currently, continuity depends on letters from the dermatologist to the GP: there is now the potential to enhance this sharing of information by using advances in information technology. Teledermatology services between GPs and dermatologists exist in some services.[28] Research in this area has focused on questions such as cost-effectiveness rather than being applied to the discharge process.[29] Having accurate information about the quality of care available in primary care may increase dermatologists' confidence in patient care and facilitate earlier discharge.

Specific influences such as country-specific national health policies, outpatient clinic policies and health service limitations imposed by insurance companies might influence clinicians' discharge decision making.[30–34] For example, clinicians working under the NHS,[31] which implements a publicly funded healthcare system, might discharge patients more readily to allow other patients to seek specialist care. Pressure to conform to a 'new to follow-up target ratio' was extremely stressful for some of these clinicians.[35] Stress may produce a hypervigilant state that impairs the quality of decision making.[36] In Australia,[32] where the federal government subsidizes a large percentage of healthcare cost, clinicians are expected to follow closely the policy guidelines on discharge. Conversely, Canada and the U.S.A. primarily adopt the fee-for-service model in which payment to clinicians is based on the number of treatments provided.[33,34] This might incentivize clinicians to delay discharge. Clinicians in healthcare systems that depend largely on private health insurance might also discharge patients prematurely owing to budget limitations set by insurers.[11] This study has

revealed many clinical and nonclinical influences. The clinician must prioritize these in an equitable and targeted way to achieve service efficiency and avoid bias. There is a distinction between influences on discharge decision making, pathways that may be developed to direct the discharge process and techniques to facilitate the process of outpatient discharge.

A limitation of this study was that the researcher's background may have caused bias during the interviews. However, the use of a single interviewer (N.A.H.) and confining the study to one region provided consistency. Unfortunately, we have little information about the 33% of consultants who did not agree to be interviewed. It is therefore possible that there may be some selection bias in the responses obtained, but the level of saturation reached in the interview numbers provides reassurance that all the important influences were identified. The participants were salaried, working in the publically funded NHS, where there is no personal financial incentive to follow-up on patients: the results of this study may not be fully applicable to healthcare delivery in which there is financial incentive to follow-up on patients. This study exclusively explored the perspectives of fully trained consultants and not trainees. In-depth face-to-face interviews were carried out in this study but limited to dermatology, whereas one study was previously conducted among three different specialties using clinical vignettes and analysis of clinicians' written responses.[5] Another study carried out semistructured interviews and focus groups but the number of participants was smaller ($n = 10$) than in our study ($n = 40$).[11] Although previous studies have shown some influences similar to those revealed by our study, such as disease severity, clinician seniority and clinic policy,[3–5] a much wider range of influences on discharge decisions has been identified. Furthermore, this study adds to previous knowledge that clinicians' emotions and attitude can influence discharge decisions and may cause bias.[1,8]

Discharge decision-making is complex. This study's findings may assist clinicians in improving the quality and consistency of the decision-making process. Further research is necessary to identify what information is critical to an appropriate discharge, and how biases can be reduced. It may be possible to develop training for the appropriate skills, incorporating information concerning which influences are likely to encourage or delay discharge. Ultimately, a systematic auditable discharge strategy may bring benefits to dermatology outpatients and to dermatologists and other healthcare providers. We confirm the importance of considering the nonclinical influences on clinicians' discharge decision making.[37] Although clinicians may sincerely try to provide the highest quality of care, in reality decisions often depend on unwarranted influences that cause bias in the discharge process. There is a need for a discharge decision algorithm to assist clinicians in this extremely common but highly complex area. This could help clinicians make more appropriate discharge decisions and improve service efficiency and delivery at times when most healthcare systems struggle with rising costs and meeting patients' expectations. Additional research on patients' perspectives is needed in order to inform quality discharge decision making.

Acknowledgments

We are grateful to the 40 consultant dermatologists from the South West, Midlands and South East of England who participated in this research. We also wish to thank the research and development teams at each of the 11 NHS Trusts for giving us permission to carry out this work.

References

1 Harun NA, Salek S, Piguet V *et al.* The dermatology outpatient discharge decision: understanding a critical but neglected process. *Br J Dermatol* 2014; **170**:1029–38.
2 Finlay AY, Davies RW, Cosker TDA *et al.* Factors influencing outpatient discharge. *Br J Dermatol* 2000; **143**(Suppl. 57):42–85.
3 Hajjaj FM, Salek MS, Basra MKA *et al.* Nonclinical influences, beyond diagnosis and severity, on clinical decision making in dermatology: understanding the gap between guidelines and practice. *Br J Dermatol* 2010; **163**:789–99.
4 Sullivan FM, Hoare T, Gilmour H. Outpatient clinic referrals and their outcome. *Br J Gen Pract* 1992; **42**:111–15.
5 Sullivan FM. How do clinicians decide to discharge someone from their out-patient clinic? *J Manag Med* 1993; **7**:24–8.
6 Burkey Y, Black M, Reeve H *et al.* Long-term follow-up in outpatient clinics. 2: the view from the specialist clinic. *Fam Pract* 1997; **14**:29–33.
7 Mariotti G, Siciliani L, Rebba V *et al.* Waiting time prioritisation for specialist services in Italy: the homogeneous waiting time groups approach. *Health Policy* 2014; **117**:54–63.
8 Hersh D. I can't sleep at night with discharging this lady: the personal impact of ending therapy on speech-language pathologists. *Int J Speech Lang Pathol* 2010; **12**:283–91.
9 Rydeman I, Törnkvist L. The patient's vulnerability, dependence and exposed situation in the discharge process: experiences of district nurses, geriatric nurses and social workers. *J Clin Nurs* 2006; **15**:1299–307.
10 Hajjaj FM, Salek MS, Basra MK *et al.* Clinical decision making in dermatology: observation of consultations and the patients' perspectives. *Dermatology* 2010; **221**:331–41.
11 Pashley E, Powers A, McNamee N *et al.* Discharge from outpatient orthopaedic physiotherapy: a qualitative descriptive study of physiotherapists' practices. *Physiother Can* 2010; **62**:224–34.
12 Chadwick R, Russell J. Hospital discharge of frail elderly people: social and ethical considerations in the discharge decision-making process. *Ageing Soc* 1989; **9**:277–95.
13 Bornstein BH, Emler AC. Rationality in medical decision making: a review of the literature on doctors' decision-making biases. *J Eval Clin Pract* 2008; **7**:97–107.
14 Britten N. Qualitative interviews in medical research. *BMJ* 1995; **311**:251.
15 Huffman WE. Kahneman's psychology of value: the sixth TW Schultz lecture. *Am J Agric Econ* 2012; **94**:285–90.
16 Shepperd S, Lannin NA, Clemson LM *et al.* Discharge planning from hospital to home. *Cochrane Database Syst Rev* 2013; **1**:CD000313.
17 Grimmer K, Moss J. The development, validity and application of a new instrument to assess the quality of discharge planning activities from the community perspective. *Int J Qual Health Care* 2001; **13**:109–16.

18 Telfer N, Colver G, Morton C. Guidelines for the management of basal cell carcinoma. *Br J Dermatol* 2008; **159**:35–48.
19 Cox N, English J. *British Association of Dermatologists' Management Guidelines*. Oxford: Wiley-Blackwell, 2011.
20 Salz T. Carefully discharge difficult patients. *Med Econ* 2012; **89**:38–40.
21 Croskerry P, Norman G. Overconfidence in clinical decision making. *Am J Med* 2008; **121**:S24–9.
22 Rungapadiachy DM. *Self Awareness in Healthcare*. New York, NY: Palgrave Macmillan, 2008.
23 Kahneman D, Klein G. Conditions for intuitive expertise: a failure to disagree. *Am Psychol* 2009; **64**:515.
24 Leaf R. *The Art of Perception*. London: Atlantic Books, 2012.
25 Loewenstein G, Lerner JS. The role of affect in decision making. *Handb Affect Sci* 2003; **619**:3.
26 Simon HA. Motivational and emotional controls of cognition. *Psychol Rev* 1967; **74**:29–39.
27 Bechara A, Damasio H, Damasio AR. Emotion, decision making and the orbitofrontal cortex. *Cereb Cortex* 2000; **10**:295–307.
28 Roman M, Jacob SE. Teledermatology: virtual access to quality dermatology care and beyond. *J Dermatol Nurses Assoc* 2014; **6**:285–7.
29 Wootton R, Bloomer S, Corbett R *et al.* Multicentre randomised control trial comparing real time teledermatology with conventional outpatient dermatological care: societal cost–benefit analysis. *BMJ* 2000; **320**:1252–6.
30 Mossialos E, Wenzl M, Osborn R, Anderson C. International profiles of health care systems 2014. Available at: http://www.commonwealthfund.org/~/media/files/publications/fund-report/2015/jan/1802_mossialos_intl_profiles_2014_v7.pdf (last accessed 9 May 2015).
31 Roland M, McDonald R, Sibbald B *et al. Outpatient Services and Primary Care: A Scoping Review of Research into Strategies for Improving Outpatient Effectiveness and Efficiency*. Manchester: National Primary Care Research and Development Centre, 2006.
32 Government of South Australia. Active discharge from specialist outpatient services guideline. Available at: http://www.sahealth.sa.gov.au/wps/wcm/connect/fc3d5b004cd8b36383d393a496684d9f/Guideline_Active+Discharge_Sept12.pdf?MOD=AJPERES&CACHEID=fc3d5b004cd8b36383d393a496684d9f (last accessed 9 May 2015).
33 The Council of Canadians. Understanding the Canada Health Act. Available at: http://canadians.org/sites/default/files/publications/CHA%20Feb%202010.pdf (last accessed 9 May 2015).
34 Medicaid.gov. Fee-for-service. Available at: http://medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/fee-for-service.html (last accessed 9 May 2015).
35 Bamji A. Outpatient follow-up ratio targets make no sense. *BMJ* 2011; **344**:d8243.
36 Janis IL, Mann L. *Decision Making: A Psychological Analysis of Conflict, Choice, and Commitment*. New York, NY: Free Press, 1977.
37 Hajjaj FM, Salek MS, Basra MKA *et al.* Non-clinical influences on clinical decision-making: a major challenge to evidence-based practice. *J R Soc Med* 2010; **103**:178–87.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Appendix S1. Clinician quotations.