Overview of cutting edge cardiology: heart failure

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Declaration of interests

• Research grants from ResMed, Boston Scientific, St Jude Medical, Bayer

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What does good care look like?

And how can we make it happen??
We will have to do things differently...
The patient ‘journey’ is complex

Goodlin S. J Am Coll Cardiol. 2009;54(5):386-396
National & international guidelines
56,915 cases
74% of all HES coded cases
Examples of the challenges:
Even in 1 (wealthy) country.....

Follow-up appointment | Total (%) |
-----------------------|-----------|
Follow-up appointment with MDT scheduled | 2013/14 | 55 |
Appointment scheduled within two weeks of discharge | 31 |

Cardiology follow-up after discharge in NHS hospitals in England (2009-11)

Cumulative incidence function with 95% confidence intervals

Days since index discharge

Cumulative incidence

Age band
- 18-44
- 45-64
- 65-79
- 80-84
- 85-89
- 90+

Bottle A et al. BMJ Open 2016; 6: e010669
A global call to action in heart failure

WHITE PAPER
May 2014

Number of national heart failure working groups that have endorsed it

42

“Policy-makers worldwide must be urged to act on the recommendations of the paper.”

1. Global Heart Failure Awareness Programme to consult online at http://www.escardio.org/communities/HFA/Pages/global-heart-failure-awareness-programme.aspx
Policy-makers urged to act on eight recommendations

- Promote acute heart failure prevention
- Optimize care transitions
- Improve end-of-life care
- Provide equity of care for all patients
- Appoint experts to lead heart failure across disciplines
- Develop and implement better measures of care quality
- Improve patient education and support
- Stimulate research into new therapies

www.oxfordhealthpolicyforum.org
/AHFreport

www.escardio.org/communities/HFA/Pages/global-heart-failure-awareness-programme.aspx
Optimization before discharge is the key action in HF care

**Acute HF In-hospital**
- Acute phase treatment
  - Intravenous therapy

**Transition treatment**
- Intravenous therapy
- Initiate/up-titration oral GDMT

**Chronic HF Outpatient**
- Long term treatment
  - Optimized oral GDMT

“Vulnerable phase”
<table>
<thead>
<tr>
<th>Recommendations or Indications</th>
<th>COR</th>
<th>LOE</th>
<th>References</th>
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<tr>
<td>Performance improvement systems in the hospital and early postdischarge outpatient setting to identify HF for GDMT</td>
<td>I</td>
<td>B</td>
<td>82, 365, 706, 792–796</td>
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| Before hospital discharge, at the first postdischarge visit, and in subsequent follow-up visits, the following should be addressed:  
a. Initiation of GDMT if not done or contraindicated;  
b. Causes of HF, barriers to care, and limitations in support;  
c. Assessment of volume status and blood pressure with adjustment of HF therapy;  
d. Optimization of chronic oral HF therapy;  
e. Renal function and electrolytes;  
f. Management of comorbid conditions;  
g. HF education, self-care, emergency plans, and adherence; and  
h. Palliative or hospice care | I   | B   | 204, 795, 797–799   |
| Multidisciplinary HF disease-management programs for patients at high risk for hospital readmission are recommended | I   | B   | 82, 800–802         |
| A follow-up visit within 7 to 14 d and/or a telephone follow-up within 3 d of hospital discharge are reasonable | IIA | B   | 101, 803            |
| Use of clinical risk-prediction tools and/or biomarkers to identify higher-risk patients are reasonable | IIA | B   | 215                 |

COR Indicates Class of Recommendation; GDMT, guideline-directed medical therapy; HF, heart failure; and LOE, Level of Evidence.
Primary care presentation
1: Urgent referral for people with previous myocardial infarction
2: Measuring serum natriuretic peptides

Assessment and diagnosis
3: 2-week assessment and diagnosis
4: 6-week assessment and diagnosis

Information
5: Education and self-management

Management
6: Multidisciplinary heart failure team
7: Treatment with ACE inhibitors, ARBs and BB
8: Cardiac rehabilitation programme
9: Monitoring stable chronic heart failure

Admitted patients
10: Management plans for people admitted to hospital
11: Contribution of multidisciplinary heart failure team to management plans
12: Hospital discharge and follow-up care

Moderate to severe chronic heart failure
13: Specialist and palliative care for people with moderate to severe chronic heart failure

NICE Quality Standards for Chronic Heart Failure
https://www.nice.org.uk/guidance/qs9
NICE guidance on acute HF
10 Key priorities for implementation

• In people presenting with new suspected acute heart failure, use a single measurement of BNP or NT-proBNP to rule out the diagnosis of heart failure.

• In people with raised NP levels, perform transthoracic Doppler 2D echocardiography to establish the presence or absence of cardiac abnormalities.

• Consider echocardiography within 48 hours of admission to enable early specialist management.

https://www.nice.org.uk/guidance/qs103 (December 2015)
NICE guidance on acute HF
10 Key priorities for implementation

• In a person presenting with acute heart failure who is already taking β-blockers, continue the β-blocker treatment unless they have a HR <50 bpm, second or third degree AV block, or shock.

• Start or restart β-blocker treatment during hospital admission in people with acute heart failure due to left ventricular systolic dysfunction, once their condition has been stabilised – for example, when intravenous diuretics are no longer needed.

• Offer an ACE inhibitor to people with acute heart failure and reduced left ventricular ejection fraction during hospital admission.

• Offer a mineralocorticoid receptor antagonist to people with acute heart failure and reduced left ventricular ejection fraction during hospital admission.

https://www.nice.org.uk/guidance/qs103 (December 2015)
NICE guidance on acute HF

10 Key priorities for implementation

• Ensure that the person’s condition is stable for typically 48 hours before discharging from hospital and/or after starting or restarting beta-blockers.

https://www.nice.org.uk/guidance/qs103 (December 2015)
1. **Scene setting and Diagnosis** - Tuesday 10 May 2016, 4:00pm-5:30pm, Committee Room 13, Portcullis House

2. **Treatment and care in hospital** - Tuesday 24 May 2016, 2:30pm-4:00pm, Committee Room 13, Portcullis House

3. **Treatment and care in the community** - Monday 13 June 2016, 2:00pm-3:30pm, Committee Room 13, Portcullis House

4. **Palliative Care** - Monday 4 July 2016, 3:00pm-4:30pm, Committee Room 7, Portcullis House

Stuart Andrew, MP (Cons) Pudsey, Horsforth & Aireborough
Handover....

Biomarkers

Systems of care

Drug therapies