

Implementation of guideline recommendation changes: the experience in Denmark

SUCCESSFUL EXAMPLES OF GUIDELINES IMPLEMENTATION FROM
NATIONAL CARDIAC SOCIETIES (NCS)

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3 JULY 2025

A guideline system that is used

Danish Society of Cardiology (DCS)

- >20 years ago, experts wrote very long guidelines; but only on selected specific areas. And only a few read them.
- In 2003 DCS took a board decision to change this and secure:
 - More uniform treatment throughout Denmark
 - Make it easy for all departments to keep their manuals up to date
 - Secure easy-to-read guidelines for everyone dealing with cardiovascular patients
 - Activate the workforce in DCS's working groups
 - Actively define what cardiologist need to know

2005-2011

The National Treatment Guideline (NBV)

- Short chapters (N=41) on most aspect of cardiology
- Available on DCS's website: www.cardio.dk
- And as a small book printed for the smock pocket
- And as an App



2011 - dd

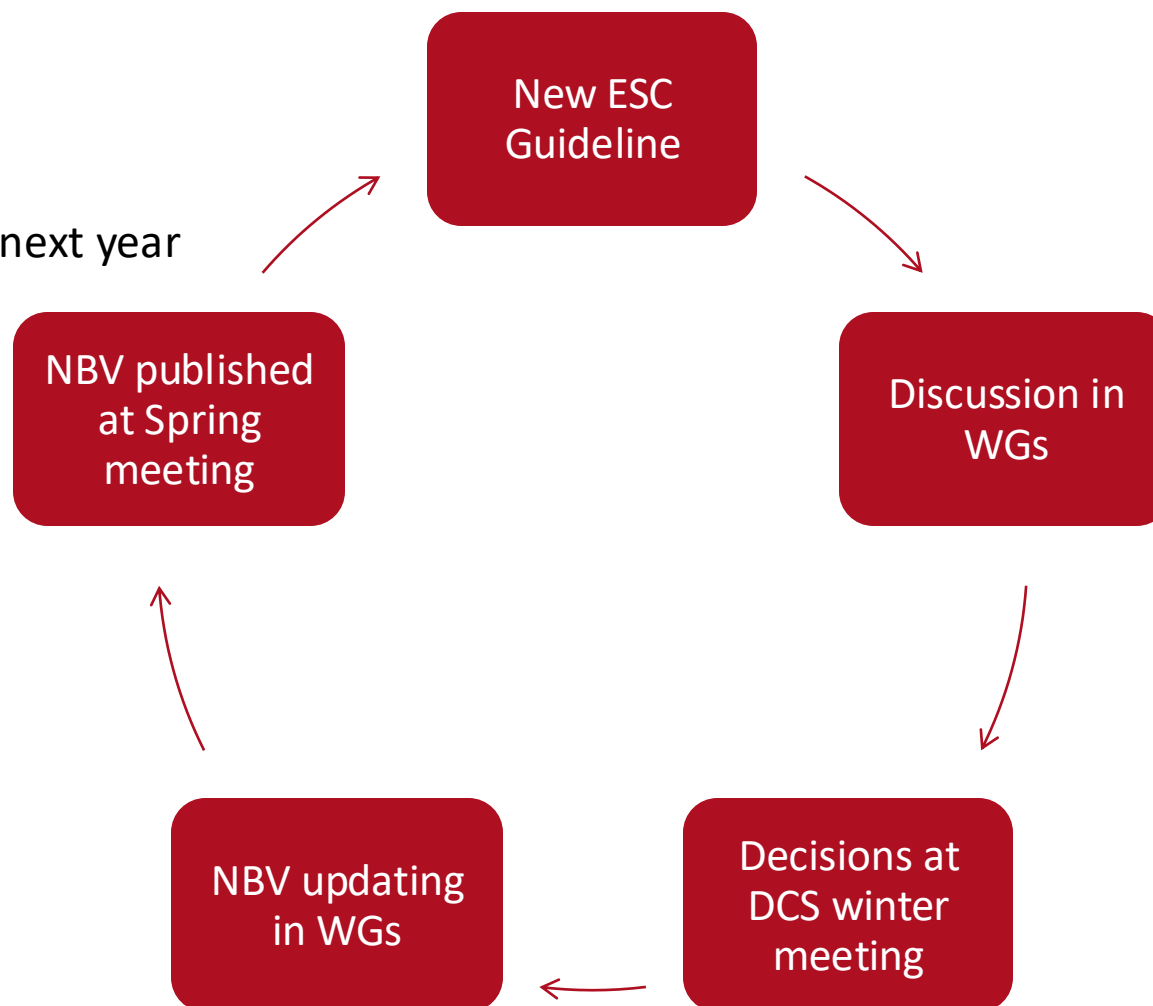
An annual wheel

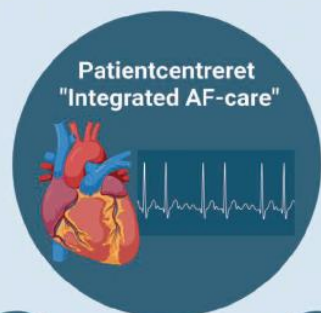
- Four New ESC Guidelines are published every year around September 1
- Discussions in DCS's WG of these guidelines until January 1
- A national meeting mid-January where these 4 guidelines are further discussed and final decision on endorsement with or without changes
- The NBV is updated based on this around May 1 at DCS's yearly meeting
- The NBV is then 'locked' for a year

Every year since 2011

Cardiovascular
Round
Table

NBV locked until May next year





Patientcentreret
"Integrated AF-care"

C

Behandling af komorbiditet
og risikofaktorer, herunder
støtte til livsstilsændringer

A

Undgå stroke
og blodpropper

Reducere symptomer
med rate- og rytme
kontrol

R

Evaluer og dynamisk genvurdering

E

Figur udviklet i Biorender.com

TEMA:
BEHANDLING AF ATRIEFLUMREN
Vital exhaustion & "løvrigt mener jeg"

DCS STRATEGI
ESC guidelines endorsement

REPORTAGE
DCS's efterårsmøde



ESC

European Society
of Cardiology

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ESC GUIDELINES

2024 ESC Guidelines for the management of chronic coronary syndromes

Developed by the task force for the management of chronic
coronary syndromes of the European Society of Cardiology (ESC)

Endorsed by the European Association for Cardio-Thoracic Surgery (EACTS)

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ESC Clinical Practice Guidelines (CPG) Committee: listed in the Appendix.

ESC subspecialty communities having participated in the development of this document:

Associations: Association of Cardiovascular Nursing & Allied Professions (ACNAP), Association for Acute CardioVascular Care (AACV), European Association of Cardiovascular Imaging (EACVI), European Association of Preventive Cardiology (EAPC), European Association of Percutaneous Cardiovascular Interventions (EAPCI), Heart Failure Association (HFA), Council of Cardiology Practice.

Working Groups: Cardiovascular Pharmacotherapy, Cardiovascular Surgery, Coronary Pathophysiology and Microcirculation, Thromboex.

Patient Forum

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anvendes. ESC guidelines anbefaler hjerte-CT som mulighed hvis stent diameter er >3 mm, men denne anvendelse har aldrig vundet større klinisk indpas i Danmark, grundet ikke-optimal diagnostisk værdi ved anvendelse af tidligere og nuværende generationer af hjerte-CT-scannere.

Specifikke kommentarer

Punkt	Uddrag	Kommentarer
Strep 3, Figure 2, Side 3434		Trin 3: I Danmark anvendes der som regel en rækkefølge som hedder Hjerte-CT først, så perfusionsundersøgelse hvis inkonklusiv. Se afsnit om generelle betragtninger
Tabel 2, Side 3437	Additionally, hs-CRP and/or fibrinogen plasma levels should be considered.	Vi mener ikke at måling af hsCRP og/eller plasminogen niveauer har plads som biomarkører i led som udredning af KKS.
Tabel 3, Side 3438	... CACS should be considered to reclassify subjects and to identify more individuals with very low (<5%) CACS-weighted clinical likelihood.	Vi mener ikke at CT skanning alene mhp CACS scoring har nogen plads i Danmark. Der skal ved behov for CT billeddiagnostisk afklaring laves fuld koronar hjerte CT.
Tabel 5 Side 3441	Recommendations for exercise ECG in the initial diagnostic management of individuals with suspected coronary syndrome	Vi mener ikke at arbejds-EKG har en rolle i udredning af KKS.
Tabel 5 Side 3441	Exercise ECG may be considered as an alternative test to rule in and rule out CAD when non-invasive imaging tests are unavailable.	Endorses ikke.
Tabel 5 Side 3441	In individuals with a low (>5%–15%) pre-test likelihood of obstructive CAD, an exercise ECG may be considered to identify patients in whom further testing can be deferred.	Endorses ikke.
Tabel 9 Side 3443	In individuals with suspected CCS and moderate or high (>15%–85%) pre-test likelihood of obstructive	Stress ekko anvendes kun i meget begrænset omfang i DK.

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	CAD, stress echocardiography is recommended to diagnose myocardial ischaemia and to estimate the risk of MACE.	Undersøgelsen kræver god billedkvalitet og erfaren operatør.
Tabel 10, Side 3444	In individuals with suspected CCS and moderate or high (>15%–85%) pre-test likelihood of obstructive CAD, stress SPECT or, preferably, PET myocardial perfusion imaging is recommended to: <ul style="list-style-type: none"> • diagnose and quantify myocardial ischaemia and/or scar; • estimate the risk of MACE; • quantify myocardial blood flow (PET) 	I Danmark er Hjerte-CT oftest førstvalg som led i udredning af KKS. FFR-CT kan overvejes som alternativ for perfusionsundersøgelser. Ved valg af perfusionsundersøgelsesmodaliteter, anbefaler vi fortsatvis PET-CT/MR-perfusion og SPECT kan anvendes afhængigt af lokale forhold. PET som førstvalg over MR hvis der samtidig ønskes vurdering af koronar flow reserve. Se generelle betragtninger.
Tabel 11: Side 3446	When ICA is indicated, measurement of FFR/FFR should be considered to evaluate the functional severity of intermediate left main stem stenosis prior to revascularization	I Danmark er der enighed i at anvende FFR.
Tabel 12 Side 3447	Recommendations for functional assessment of epicardial artery stenosis severity during invasive coronary angiography to guide revascularization. <ul style="list-style-type: none"> - FFR/FFR (significant <0.8 or <0.85, respectively) 	I Danmark er der enighed i at anvende FFR.
Figure 5, side 3448		Denne figur er svar på appellerer til de danske forhold idet CAC-scoring alene ikke anvendes. Ligeledes anvendes arbejds-EKG ikke til udredning for KKS i Danmark.

Figure 6, Side 3449		Denne figur er svar på appellerer til de danske forhold da hjerte-CT er ofte førstvalg. I dansk kontekst skal figuren forstås således at Hjerte-CT er oftest førstvalg hos lang de fleste patienter uanset clinical likelihood scoren fra 5% - 85% (lav til høj). Er patienten ikke egnet til Hjerte-CT, kan der vælges non-invasiv perfusionsundersøgelse, alternativ KAG. Se afsnit om generelle betragtninger.
Første afsnit, anden Side 3453:	For patients with obstructive CAD and refractory symptoms despite optimized GDMT, a referral for ICA may be considered to improve symptoms through revascularization. Optimization of medical therapy by combining two or more antianginal drugs can safely be obtained over 6 weeks in almost all patients and should be awaited before referral to ICA	Vi støtter at patienter med ikke prognostiske stenoser initialt kan behandles medicinsk, men vi mener, at PCI i nogle tilfælde kan give en mere effektiv symptomlindring, mest udtalt hos patienter med svar angina. Beslutning om initial medicinsk behandling og/eller revascularisering bør tages i samråd med patienten.
Tabel 16, Side 3459	Ivabradine should be considered as add-on antianginal therapy in patients with left ventricular systolic dysfunction (LVEF <40%) and inadequate control of symptoms, or as part of initial treatment in properly selected patients.	Vi mener at ivabradine ikke bør anvendes rutinemæssigt.
Side 3465, Afsnit 4.3.1.3	... (prasugrel stopped >7 days before; clopidogrel >5 days before; ticagrelor >3 days before; and rivaroxaban, apixaban, edoxaban, and dabigatran 1–2 days before, depending on drug and renal function).	Der henvises til anbefalingerne fra Dansk Selskab for Trombose og Hæmostase: før kirurgiske procedurer med høj blødningsrisiko, som CABO, pauseres: - Dabigatran, Apixaban og Edoxaban mindst 3 dage før - Rivaroxaban mindst 2 dage før
Tabel 17, Side 3466	After uncomplicated PCI in CCS patients with concomitant indication for OAC: • early cessation of aspirin (<1 week); • followed by continuation of OAC and clopidogrel: up to 6 months in patients not at high ischaemic risk; or • up to 12 months in patients at high ischaemic risk; • followed by OAC alone; is recommended	Vi mener at clopidogrel rutinemæssigt kun bør anvendes i op til 6 måneder efter PCI hos patienter med KKS under samtidig behandling med OAC.
Tabel 20: side 3469	In CCS patients with atherosclerotic CAD, low-dose colchicine (0.5 mg daily) should be considered to	Lav-dosis Colchicin kan overvejes som sekundær profylaktisk (historik

NBV

Why is it popular?

- ‘Everyone’ is involved in the writing process. Not just experts.
- This gives a feeling of ‘Ownership’
- ESC guidelines are respected – but not really used before they have been translated into ‘our own NBV’
- The NBV has now become the official document for several national supervising bodies

Implementation of guidelines

- We must create a feeling of ownership among users
- Consider involving NCS more in the implementation
 - Guidelines are guidelines
 - Not strict rules
 - And certainly not uniformly applicable in all cultures

Perhaps we should respect these differences more
And help implementing with local variations