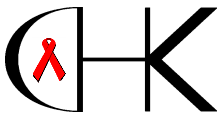


DANHIV

Dansk HIV database

National Årsrapport 2023



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Forord

DANHIV blev oprettet som en regional klinisk kvalitetsdatabase i RegionH i sommeren 2015. Imidlertid har projektet fungeret som Det Danske HIV Kohorte Studie (DHK) siden 1998. DHK har fungeret som en kombineret kvalitetsdatabase og forskningsdatabase. Data i DHK går tilbage til 1. januar 1995, hvorfor vi allerede nu kan vise udviklingen over en lang årrække for de forskellige indikatorer. DHK har siden 2004 udgivet årlige rapporter, hvori der også har været angivelser af behandlingsresultater, dog uden egentlige indikator mål. Hvad angår generelle data for HIV i Danmark henvises derfor til DHKs tidligere årsrapporter. Det skal bemærkes, at data i DANHIV og DHK ikke er udregnet på helt samme datasæt – bl.a. inkluderer DANHIV (og dermed denne rapport) kun personer med et dansk CPR nummer, idet dette er et krav for at kunne følge patienterne i bl.a. CPR registeret, Landspatientregisteret etc.

HIV-behandlingen er i Danmark organiseret på et centralt behandlingscenter i hver region (dog to i Region Hovedstaden). Disse centre er Rigshospitalet, Hvidovre, Roskilde, Odense, Aarhus og Aalborg. Hertil kommer Hillerød (associeret med Hvidovre), Herlev (associeret med Rigshospitalet), Kolding (associeret med Odense) og Gødstrup (associeret med Aarhus). Analyserne er derfor grupperet regionsvist, dog ikke for Region Hovedstaden, hvor Rigshospitalet (inkl. Herlev) og Hvidovre (inkl. Hillerød) er analyseret separat.

Det kan allerede her afsløres, at behandlingsresultaterne indenfor HIV-behandlinger i Danmark er endog aldeles gode. Er DANHIV dermed overflødig? Nej, det at DANHIV kan fremvise så gode resultater er en følge af, at denne analyse i virkeligheden bygger på mere end 20 års kvalitets-arbejde i DHK. En vedvarende belysning af HIV behandlingsresultaterne via DANHIV er central for, at vi kan opretholde den flotte kvalitet i behandlingen. Hertil kommer, at DANHIV (DHK) i Medicinrådet har kunnet medvirke til at belyse behandlingsregimers effektivitet og dermed retfærdiggøre betydelige besparelser i medicinudgifterne i Danmark.

Indtil foråret 2023 var det hensigten at drive DANHIV via RKKPs sekretariat. Det har dog ikke vist sig muligt, og i 2024 besluttede bestyrelsen for RKKP at nedlægge DANHIV. Statens Seruminstitut har imidlertid tilbudt at overtage DANHIV, hvad vi er meget glade for, og vi forventer at DANHIV vil fungere i SSI regi fra 2025.

Vi vil gerne benytte lejligheden til at takke Preben og Anne Simonsens Fond for støtte til Det Danske HIV Kohorte Studie, som har været overordentlig vigtig for databasen.

Niels Obel og Lars HH Omland
Infektionsmedicinsk klinik
Rigshospitalet

Beskrivelse af sygdomsområdet.

HIV er en kronisk virussygdom, som væsentligst overføres seksuelt og med blod. Den er særlig prævalent blandt mænd som har sex med mænd (MSM), personer med blødersygdom, stofmisbrugere og personer fra Afrika syd for Sahara. HIV angriber immunsystemet, væsentligst CD4 cellerne og immundefekten medfører, at den ubehandlede HIV-inficerede person udvikler særlige infektioner (AIDS) og slutteligt dør. Behandling rettet mod HIV (antiretroviral behandling) virker væsentligst ved at hæmme visse af HIVs enzymer (revers transkriptase, protease og integrase). Da HIV hurtigt kan mutere og dermed udvikle resistens mod de antiretrovirale stoffer, er det væsentligt, at der lægges et stort antiretroviralt pres på HIV. Dette gøres klassisk ved at anvende en kombination af tre antiretrovirale stoffer. Behandlingen kan ikke kurere HIV, men kan stoppe replikationen af HIV. Når HIV ikke længere kan formere sig i kroppen, kan immunsystemet genoprettes, og personen som lever med HIV får derfor et for praktiske formål normalt fungerende immunsystem. I sidste ende medfører det en nedsat risiko for at udvikle AIDS og nedsat risiko for død. Desuden er det vist, at personer der lever med HIV, men har et fuldt supprimeret viral load ikke smitter seksuelt. Det er derfor vigtigt, at man med den antiretrovirale behandling får nedsat HIV mængden i kroppen (viral load), som efterfølgende giver øget CD4 celletal, som igen medfører nedsat risiko for AIDS og død. Viral load, CD4 celletal og død er således alle meningsfulde effektmål, når man vurderer kvaliteten af HIV-behandlingen, og vi har derfor valgt at illustrere disse behandlingsmål i nærværende rapport.

Styregruppe for DANHIV

Overlæge, dr.med Lars HH Omland, Klinik for Infektionsmedicin, Rigshospitalet (formand)

Professor, overlæge, dr.med. Jan Gerstoft, Klinik for Infektionsmedicin, Rigshospitalet

Overlæge, dr.med. Gitte Kronborg, Infektionsmedicinsk Afdeling, Amager-Hvidovre Hospital

Overlæge, Suzanne Lunding, PhD, Infektionsmedicinsk afdeling, Herlev Hospital

Overlæge Lars Nielsen, PhD, Lunge og infektionsmedicinsk afdeling, Nordsjællands Hospital - Hillerød

Professor, overlæge, dr.med. Isik Somuncu Johansen, Infektionsmedicinsk Afdeling Q, Odense Universitetshospital

Overlæge, dr.med. Carsten Schade Larsen, Infektionsmedicinsk Afdeling Q, Aarhus Universitetshospital

Cheflæge, PhD Michael Dalager-Pedersen, Infektionsmedicinsk Afdeling, Aalborg Universitetshospital

Afdelingslæge, Steffen Leth, Medicinsk Afdeling, Regionshospitalet Gødstrup

Ledende Overlæge Janne Jensen, Medicinsk Afdeling, Sygehus Lillebælt, Kolding Sygehus

Afdelingslæge Anders Porskrog, Medicinsk Afdeling, Sjællands Universitetshospital, Roskilde

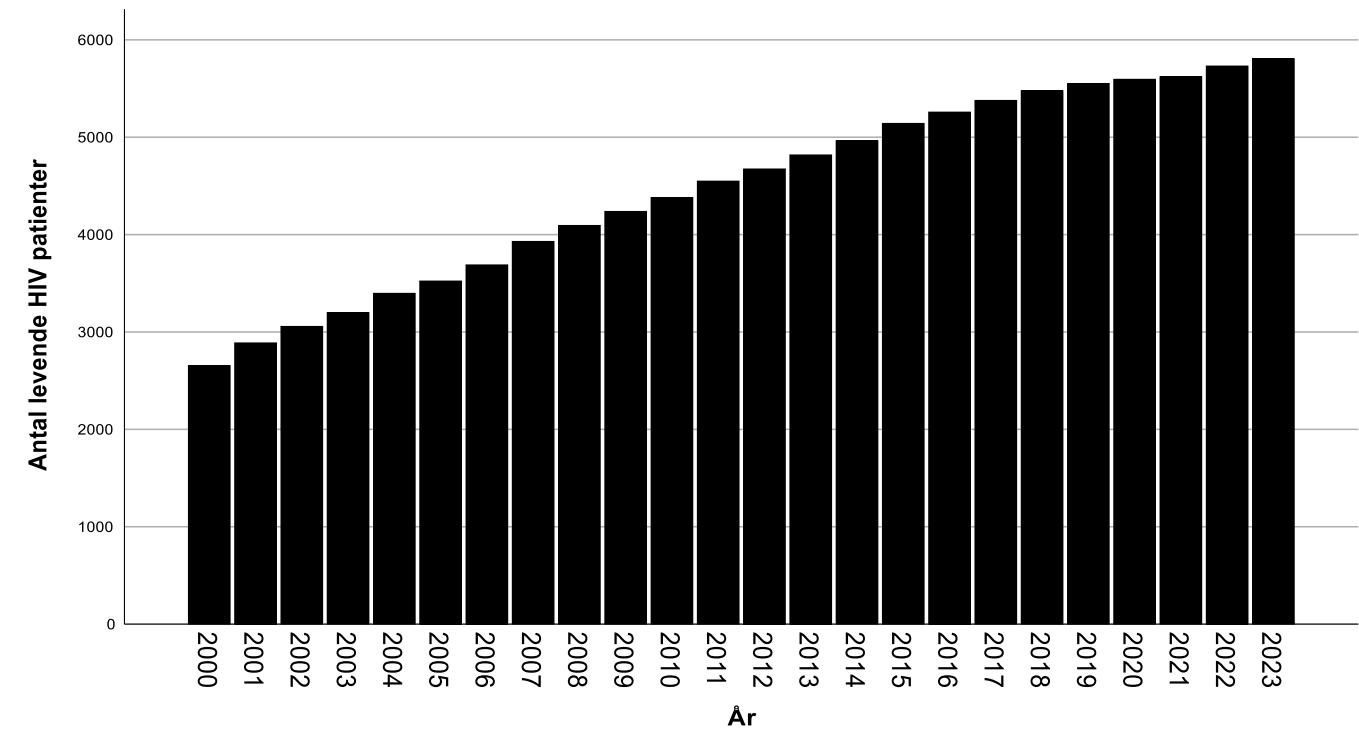
Patientrepræsentant Jens Lind Knudsen.

Demografiske data

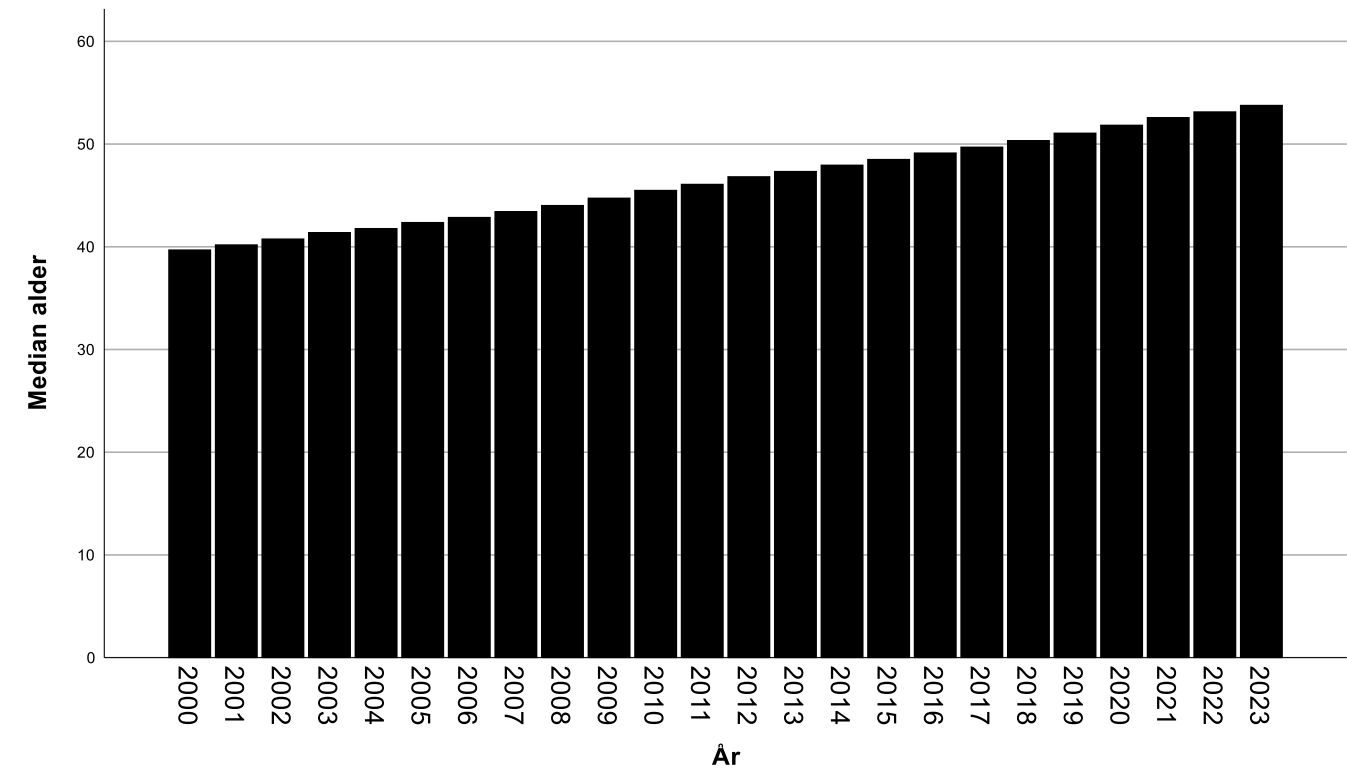
Tekst	RH	HV	RSjælland	RSyd	RMidt	RNord
Alle	3035 (100%)	2585 (100%)	302 (100%)	1006 (100%)	1249 (100%)	422 (100%)
Kvinder	473 (16%)	699 (27%)	99 (33%)	338 (34%)	386 (31%)	139 (33%)
MSM	1743 (57%)	1005 (39%)	78 (26%)	263 (26%)	389 (31%)	114 (27%)
Stofmisbrug	146 (5%)	367 (14%)	18 (6%)	50 (5%)	44 (4%)	28 (7%)
Blodtransfusion	43 (1%)	20 (1%)	1 (0%)	7 (1%)	26 (2%)	0 (0%)
Heteroseksuelt	707 (23%)	857 (33%)	115 (38%)	460 (46%)	512 (41%)	201 (48%)
Andet/Ukendt	385 (13%)	303 (12%)	88 (29%)	219 (22%)	263 (21%)	70 (17%)
Perinatalt	11 (0%)	33 (1%)	2 (1%)	7 (1%)	15 (1%)	9 (2%)

RH: Rigshospitalet + Herlev.
HV: Hvidovre + Hillerød
RSjælland: Region Sjælland
RSyd: Region Syd
RMidt: Region Midt
RNord: Region Nord

Antal levende HIV patienter i behandling i Danmark fordelt på årstal



Mediane alder på levende HIV patienter i behandling i Danmark



Det ses, at antallet af levende personer diagnosticeret med HIV i Danmark er stort set fordoblet over de sidste 20 år. Desuden ses det, at alderen overordnet set er steget med mere end 10 år.

Indikatorresultater – HIV

Indikator 1: Overlevelse.

Nedennævnte illustrerer overlevelse for HIV patienter fra 1 januar 2018 og 6 år frem (udregnet som Kaplan-Meier estimater) og stratificeret på behandlingscentre. Desuden er samme data illustreret ved egentlige Kaplan-Meier kurver.

Region	Antal HIV patienter, som indgår i undersøgelsen	Antal døde i åerioden.	6 års overlevelse (%)
RH	2234	156	92,4
HV	1686	103	93,4
RSjælland	277	18	92,1
RSyd	781	49	92,9
RMidt	998	72	92,2
RNord	337	24	92,0

RH: Rigshospitalet + Herlev.

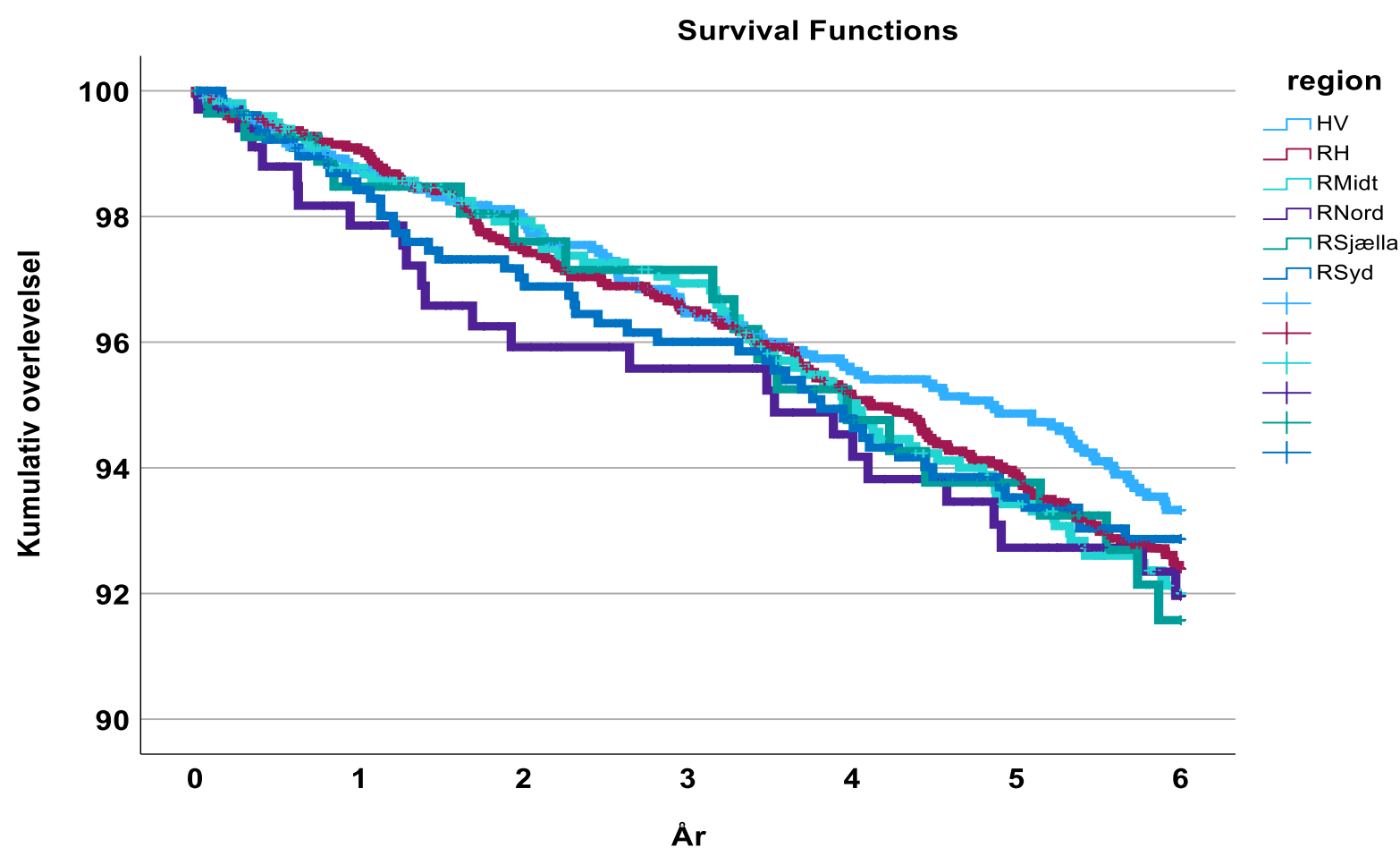
HV: Hvidovre + Hillerød

RSjælland: Region Sjælland

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Epidemiologiske kommentarer til indikator 1:

I ovennævnte analyser er anvendt KM estimater af 6 års overlevelse efter 1 januar 2018. Tabellen beskriver således den estimerede overlevelse 6 år efter 1 januar 2018. Det ses, at 6 års overlevelse er cirka 92%, og der observeres ikke betydende forskellige mellem de 6 HIV centre i Danmark. Indikator 1 viser 6 års overlevelse (beregnet fra 1 januar 2018). Overlevelsen er endog meget høj, og der kan i de kommende år ikke forventes en væsentlig bedring i denne indikator. Styregruppen anbefaler, at der fortsat monitoreres på denne parameter. Skønt surrogatparametre som viral load og CD4 tal er vist at have en nær sammenhæng med mortalitet, mener vi, det er væsentligt at kunne påvise, at behandlingen også giver en ganske markant effekt, hvad angår ufravigeligt ultimativt hårde endemål som død. Det er også vigtigt at illustrere, om der er geografiske forskelle i disse mål.

Indikator 2: Initiering af behandling.

Andel der starter antiretroviral behandling indenfor 6 måneder efter første besøg i et HIV-ambulatorium.

Årstal	RH		HV		RSjælland		RSyd		Rmidt		RNord	
	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)
2000	86	66	69	57	6	50	30	47	31	71	8	63
2001	108	61	101	64	4	50	20	60	36	56	17	59
2002	69	64	76	58	5	40	39	54	31	55	15	53
2003	63	59	66	58	4	25	25	60	32	53	12	75
2004	92	55	82	48	9	44	30	60	44	52	18	72
2005	74	41	56	45	5	60	34	53	35	54	8	75
2006	82	45	66	50	6	0	25	52	43	56	11	82
2007	100	46	67	57	10	30	38	58	49	45	19	63
2008	89	55	66	64	10	70	22	73	47	49	12	58
2009	74	58	57	54	5	100	25	76	32	59	9	100
2010	76	70	51	82	8	25	37	70	41	78	18	67
2011	91	85	61	69	11	73	31	97	44	73	9	78
2012	73	84	43	84	10	90	23	74	27	81	15	67
2013	92	87	59	88	8	100	25	80	34	65	14	86
2014	80	90	60	83	15	100	29	90	32	81	15	93
2015	89	94	43	95	10	100	23	96	39	90	16	94
2016	67	97	43	95	11	91	30	87	31	100	5	100
2017	74	100	38	97	19	100	18	94	36	94	10	100
2018	67	97	44	100	13	100	20	90	25	100	10	100
2019	48	100	43	100	12	92	33	94	16	94	6	100
2020	40	98	39	100	13	92	20	95	19	100	9	100
2021	33	100	25	100	7	86	19	100	13	92	8	100
2022	57	98	38	87	23	100	39	97	32	100	16	94
2023	32	97	37	100	23	96	34	94	32	100	14	100

Antal: Det antal patienter, som på det konkrete center indgår i analysen.

RH: Rigshospitalet + Herlev.

HV: Hvidovre + Hillerød

RSjælland: Region Sjælland

RSyd: Region Syd

RMidt: Region Midt

RNord: Region Nord

Kommentarer til indikator 2

Ovenstående analyser illustrerer, hvor mange der initierer antiretroviral behandling senest 6 mdr. efter kontakt til et dansk HIV center. Analyserne illustrerer, at fraktionen, som hurtigt sættes i behandling, er steget betydeligt og for praktiske formål viser det, at alle patienter nu sættes hurtigt i behandling.

Indikator 3: HIV-virus-supprimering.

Andel af HIV registrerede, hos hvem virus er supprimeret til <200 HIV-RNA/ml inden for det første år efter start på antiretroviral behandling.

Årstal	RH		HV		RSjælland		RSyd		Rmidt		RNord	
	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)
2000	90	94	76	91	4	75	23	87	34	91	9	89
2001	90	90	91	91	4	75	19	84	34	94	12	92
2002	70	93	64	83	4	100	33	85	21	76	9	89
2003	56	95	62	95	3	67	25	92	28	96	9	100
2004	71	96	63	92	7	100	30	83	26	88	13	100
2005	62	95	46	80	4	75	22	95	28	89	10	100
2006	64	94	64	92	3	100	24	92	36	100	12	100
2007	68	99	71	90	8	88	27	89	37	100	12	92
2008	100	97	65	91	14	100	27	100	46	98	9	100
2009	96	97	69	97	7	100	28	96	38	97	14	86
2010	92	97	75	93	6	100	36	94	60	97	11	100
2011	88	99	65	97	12	92	31	90	48	98	15	100
2012	83	95	45	100	9	100	21	90	30	100	8	88
2013	80	99	54	93	9	100	20	100	25	100	19	95
2014	77	100	54	98	9	100	31	97	28	100	13	92
2015	94	98	54	94	5	80	25	100	41	98	16	100
2016	74	97	47	96	1	100	28	100	42	100	12	92
2017	86	95	23	100	19	100	16	100	33	100	11	91
2018	68	99	44	100	6	100	18	94	22	100	5	100
2019	39	100	40	100	9	100	29	97	18	100	7	100
2020	33	100	30	97	10	100	13	92	15	100	6	100
2021	28	100	26	100	5	100	3	100	8	88	10	100
2022	49	98	29	97	23	100	35	97	29	97	10	90

Antal: Det antal patienter, som på det konkrete center indgår i analysen.

RH: Rigshospitalet + Herlev.

HV: Hvidovre + Hillerød

RSjælland: Region Sjælland

RSyd: Region Syd

RMidt: Region Midt

RNord: Region Nord

Kommentarer til indikator 3

Ovenstående analyser illustrerer, hvor mange patienter, som indenfor det første år efter start på antiretroviral behandling opnår viral load < 200 kopier/ul. Analyserne illustrer, at fraktionen, som opnår dette behandlingsmål er steget betydeligt og for praktiske formål viser det, at alle patienter nu kan forvente at opnå dette behandlingsmål.

Indikator 4: HIV-virus-supprimering i den samlede HIV population.

Andel af det samlede antal HIV patienter, hos hvem virus er supprimeret til <200 HIV-RNA/ml.

Årstal	RH		HV		RSjælland		RSyd		Rmidt		RNord	
	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)
2000	930	62	805	54	44	50	237	53	323	52	95	61
2001	1024	65	892	60	47	55	254	59	354	59	112	55
2002	1060	71	937	66	50	62	283	57	384	59	113	61
2003	1119	74	978	68	56	55	304	64	403	68	126	71
2004	1180	72	1035	70	64	58	326	66	418	72	143	80
2005	1214	76	1029	73	67	67	350	69	425	73	146	71
2006	1267	79	1067	75	73	66	364	72	460	78	148	78
2007	1347	79	1117	79	82	65	398	72	500	80	163	79
2008	1409	81	1172	81	96	72	410	77	554	83	177	77
2009	1461	83	1202	84	101	81	425	80	576	85	183	81
2010	1516	87	1231	87	111	80	460	85	626	89	204	81
2011	1577	88	1256	90	121	81	487	87	665	89	206	86
2012	1621	90	1269	91	132	84	497	89	684	89	218	87
2013	1682	90	1292	91	137	90	499	91	704	91	237	86
2014	1732	94	1316	94	148	93	521	93	723	94	245	88
2015	1804	95	1357	95	115	84	544	93	751	95	260	89
2016	1839	96	1372	96	104	83	568	96	782	94	258	93
2017	1896	95	1378	97	106	84	591	97	805	97	268	95
2018	1915	97	1169	98	184	97	595	97	819	97	266	95
2019	1900	98	1409	96	148	95	609	96	805	98	260	95
2020	1801	98	1383	98	194	93	605	96	805	98	268	96
2021	1827	98	1354	98	200	99	633	97	834	100	269	99
2022	1823	98	1330	98	212	91	654	97	842	98	286	97
2023	1820	98	1403	98	247	96	692	97	849	98	293	96

Antal: Det antal patienter, som på det konkrete center indgår i analysen.

RH: Rigshospitalet + Herlev.

HV: Hvidovre + Hillerød

RSjælland: Region Sjælland

RSyd: Region Syd

RMidt: Region Midt

RNord: Region Nord

Kommentarer til indikator 4

Ovenstående analyser illustrerer, hvor mange patienter, som på det konkrete center og år har et viral laod < 200 kopier/ul. Analyserne illustrer, at fraktionen, som opnår dette behandlingsmål er steget betydeligt og for praktiske formål viser det, at alle patienter nu kan forvente at opnå dette behandlingsmål.

Indikator 5: CD4 celletal.

Andel af HIV-populationen, som er startet antiretroviral behandling efter 1. januar 2000 og har et CD4 celletal over 200 celler/ μ l det pågældende kalenderår.

Årstal	RH		HV		RSjælland		RSyd		Rmidt		RNord	
	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)	Antal	Fraktion (%)
2000	933	86	807	81	44	77	239	84	322	80	96	85
2001	1023	88	898	86	48	81	254	87	355	83	112	82
2002	1060	91	943	89	50	82	286	87	387	86	119	84
2003	1123	92	984	89	55	84	304	90	404	88	128	86
2004	1183	91	1038	90	64	81	331	90	435	91	143	87
2005	1214	93	1033	92	69	91	339	91	450	90	145	90
2006	1267	94	1070	92	75	92	358	90	488	91	147	93
2007	1335	95	1103	93	81	89	394	91	524	93	161	93
2008	1406	95	1166	93	95	92	410	91	574	93	176	92
2009	1461	95	1204	95	102	89	429	92	602	93	166	92
2010	1517	95	1228	95	110	92	465	90	641	90	199	94
2011	1581	96	1255	95	120	93	497	91	681	94	207	95
2012	1617	96	1266	96	133	87	500	92	686	94	218	95
2013	1672	96	1287	96	133	89	501	93	714	95	237	95
2014	1721	96	1304	97	143	89	521	93	740	96	244	93
2015	1732	96	1349	97	148	90	527	94	758	96	258	93
2016	1757	97	1363	96	153	93	526	95	792	96	259	96
2017	1725	97	1359	98	169	95	571	96	817	97	264	95
2018	1778	97	1368	98	184	93	605	96	835	96	267	96
2019	1708	97	1394	97	187	95	632	96	843	97	268	95
2020	1680	96	1346	97	195	92	622	96	838	97	266	95
2021	1693	97	1335	97	200	94	644	95	842	97	263	95
2022	1666	97	1323	96	222	93	664	95	849	98	241	96
2023	1703	97	1307	96	246	93	697	96	851	98	241	96

Antal: Det antal patienter, som på det konkrete center indgår i analysen.

RH: Rigshospitalet + Herlev.

HV: Hvidovre + Hillerød

RSjælland: Region Sjælland

RSyd: Region Syd

RMidt: Region Midt

RNord: Region Nord

Kommentarer til indikator 5

Ovenstående analyser illustrerer, hvor mange patienter, som det pågældende kalenderår har opnået et CD4 tal >200 celler/ μ l. Analyserne illustrer, at fraktionen, som opnår dette behandlingsmål er steget betydeligt og for praktiske formål viser det, at alle patienter nu kan forvente at opnå dette behandlingsmål.

Samlet vurdering

Rapporten giver data for 5 indikatorer. I modsætning til endemålet "død" er de fire indikatorer surrogatmarkører, som er vist i tidligere studier at have meget stor betydning for den kliniske progression i sygdommen. Det ses, for alle surrogatmarkører, at der er opnået imponerende resultater i samtlige danske regioner. Fremtidige udfordringer bliver således ikke bare at opnå bedre resultater, men i lige så høj grad at fastholde de nuværende gode behandlingsresultater. HIV er en sygdom, hvor selv kortvarig suboptimal behandlingsstrategi kan medføre, at fremtidig behandling bliver endog meget vanskelig.

Anbefaling: HIV-behandlingen i Danmark har været baseret på:

- 1) centralisering af behandlingen.
 - 2) et velfungerende samarbejde mellem regionernes afdelinger, dels i Dansk Selskab for Infektionsmedicins Guideline gruppe (har fungeret siden 1997), dels i fagudvalget under Medicinrådet.
 - 3) en overvågning af behandlingsresultaterne siden begyndelsen af årtusindeskiftet - først i Den Danske HIV Kohorte Studie og nu i DANHIV.
- Styregruppen kan kun opfordre til, at denne struktur bevares og underbygges.

Publikationsliste

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