En enkel rapport om utfyllingsgrad av skjema i NNRR

NNRR

April 2022

Bakgrunn/innledning

Denne rapporten tar for seg datakvaliteten i NNRR. Den fokuserer på utfyllingsgrad og ser på følgende problemstillinger:

- Andel besvart av spørsmålene
- Forholdet mellom utfylte pasientskjema og behandlerskjema

NNRR består av fire skjemaer:

- Pasientskjema før behandling - 1a
- Behandlerskjema - 1b
- Pasientskjema 6 mnd etter behandling - 2
- Pasientskjema 12 mnd etter behandling - 3

Skjemaene har felter som i MRS-løsningen er delt inn i følgende datatyper:

- Dato/Tid
- Enkeltvalg
- Tall
- Text
- Avkrysning
- Id (Guid)

De tre NNRR-skjemaene har (ifølge kodebok hentet fra MRS-løsningen) følgende fordeling av datatyper.

Table 1: Antallet felter på NNRR sine skjema etter felttype

	Avkrysning	Dato/tid	Enkeltvalg	Tall	Tekst
Skjema 1a	50	9	102	48	16
Skjema 1b	88	9	32	13	33
Skjema 2	11	8	53	26	13
Skjema 3	10	7	46	19	12

Denne rapporten fokuserer på tre datatyper, Avkrysning, Enkeltvalg og Numerisk siden disse utgjør festeparten av feltene. Her følger en kort forklaring til datatypene.

Avkrysning

Dette er boolske variabler (True/False) med default-verdi "False". Avkrysningsboksene er typisk organisert under overskrifter hvor én eller flere kryss forventes satt. Det finnes derfor ingen fasit på hvor mange bokser som skal være avkrysset ved en komplett utfylling.

Enkeltvalg

Dette er kategoriske variabler hvor ett alternativ velges fra en liste. I de fleste tilfeller er manglende verdier kodet som -1 men i noen tilfeller kodes de med 0. I presentasjon av utfyllingsgrad brukes kun de Enkeltvalg-variablene som er kodet numerisk i datadumpen, hvilket gjør at en del variabler faller bort fra vurderingen. I tillegg må det presiseres at ikke alle registrerte nødvendigvis skal svare på alle spørsmål. F.eks. finnes det nakkespesifikke verktøy som ikke skal benyttes av de med utelukkende ryggsmerter.

Numerisk

Disse variablene er som regel én av tre typer:

- Velg et antall (f.eks. barn) eller tall på en skala (f.eks. smerter fra 0-10).
- Koding for et svaralternativ som skal inngå i beregningen av en score.
- En score eller prosent

Forhold mellom skjema

Denne rapporten benytter data fra pasienter med besøksdato mellom 2021-01-04 og 2021-12-31 samt oppfølginger registrert mellom 2021-01-01 og 2021-12-31.

Det er totalt 5248 skjema 1a i utvalget og 5314 skjema 1b. A disse er det 301 pasientskjema som mangler klinikerskjema og 367 klinikerskjema som mangler pasientskjema. Av de 0 som hadde konsultasjon 7 eller flere måneder siden er det 0 som ikke har oppfølgingsdata.

Manglende utfyllinger

Numeriske variabler

Skjema 1a

	Antall_tom	Andel
UnitId	0	0.0
FormTypeId	0	0.0
FormVersionNumber	0	0.0
HealthUnitId	3444	65.6
PatientAge	0	0.0
MunicipalNumber	0	0.0
CurrentMunicipalNumber	0	0.0
PostalCode	12	0.2
OwnChildren	400	7.6
HouseholdChildren	688	13.1
IsEmployedPercent	1714	32.7
S2_SickLeave_Percent	3587	68.3
S2_Pension_Percent	4834	92.1
SickLeaveSameReasonLastYear	3	0.1
SickLeaveSameReasonLastYearCount	128	2.4
SickLeaveStartMonth	4787	91.2
ProfessionalCapability	613	11.7
ProfessionalHeavy	5248	100.0
ProfessionalMonotonous	5248	100.0
ProfessionalSatisfied	904	17.2
PainExperiencesNoActivity	260	5.0
PainExperiencesActivity	271	5.2
OdiScore	284	5.4
OdiIndex	0	0.0

	Antall_tom	Andel
NdiScore	4049	77.2
NdiIndex	0	0.0
FabQ1	259	4.9
FabQ2	274	5.2
FabQ3	280	5.3
FabQ4	293	5.6
FabQ5	353	6.7
FabQ6	386	7.4
FabQ7	431	8.2
FabQ8	442	8.4
FabQ9	449	8.6
FabQ10	464	8.8
FabQ11	563	10.7
FABQScore1	246	4.7
FABQScore2	324	6.2
FABQScore3	239	4.6
HSCL10Score	272	5.2
UHIScore	0	0.0
UHIIndex	0	0.0
Eq5dHealthLevel	5248	100.0
Eq5dScore	5248	100.0
Eq5d_L_spm6	843	16.1
Score_EQ5DL	0	0.0
NofPainRegions	3	0.1

Skjema 1b

	Antall_tom	Andel
UnitId	0	0.0
FormTypeId	0	0.0
FormVersionNumber	0	0.0
HealthUnitId	3589	67.5
PatientAge	0	0.0
MunicipalNumber	0	0.0
CurrentMunicipalNumber	0	0.0
PostalCode	15	0.3
WorkingPercent	5314	100.0
SickLeave_percent	5314	100.0
Pension_percent	5314	100.0
VentetidFraHenvisningTilBesok	5312	100.0
VentetidFraHenvisningTilTilbud	5312	100.0

Skjema 2

	Antall_tom	Andel
UnitId	0	0.0
FormTypeId	0	0.0
FormVersionNumber	0	0.0
HealthUnitId	1763	75.1
PatientAge	0	0.0

	Antall_tom	Andel
MunicipalNumber	0	0.0
CurrentMunicipalNumber	0	0.0
PostalCode	7	0.3
OdiScore	120	5.1
OdiIndex	0	0.0
NdiScore	1800	76.7
NdiIndex	0	0.0
Eq5dHealthLevel	2347	100.0
Eq5dScore	2336	99.5
Eq5d_L_spm6	231	9.8
HealthLevel	2334	99.4
IsEmployedPercent	882	37.6
S2_Working_Percent	2335	99.5
S2_SickLeave_Percent	1977	84.2
S2_Pension_Percent	2222	94.7
WorkingPercent	2335	99.5
SickPercent	2346	100.0
DisabilityPercent	2347	100.0
RecoverdTime	2341	99.7
SickLeaveStartMonth	2254	96.0
CurrentWorkPoints	256	10.9

Kategoriske variabler

Skjema 1a

	Antall_tom	Andel
FormStatus	5248	100.0
PatientGender	2404	45.8
AddressQuality	5210	99.3
FamilyStatus	236	4.5
NationalCountry	222	4.2
NationalInterpreter	5049	96.2
EducationLevel	257	4.9
ReadWriteDifficulties	244	4.6
IsEmployed	1647	31.4
ProfessionalPhysicalCapability	314	6.0
ProfessionalPsychicalCapability	350	6.7
PainDurationNow	255	4.9
PainDisable	370	7.1
PainCompensation	343	6.5
ProfessionWantedBack	923	17.6
Smoking	249	4.7
PainMedicinePrescription	450	8.6
PainMedicineNoPrescription	566	10.8
PhysicalActivity	299	5.7
TreatmentEarlierOther	234	4.5
TreatmentEarlierPhysioTherapist	3169	60.4
TreatmentEarlierPhysioTherapistOther	3968	75.6
TreatmentEarlierManuelTherapi	4567	87.0
TreatmentEarlierPcykomotorTherapist	5056	96.3
TreatmentEarlierChiropractor	3531	67.3

	Antall_tom	Andel
TreatmentEarlierOperation	4871	92.8
TreatmentEarlierOtherTreatment	4705	89.7
OdiPain	238	4.5
OdiPersonalCare	239	4.6
OdiLift	240	4.6
OdiWalk	286	5.4
OdiSit	272	5.2
OdiStand	262	5.0
OdiSleep	242	4.6
OdiSex	680	13.0
OdiSocial	285	5.4
OdiTravel	337	6.4
NdiIntensity	4033	76.8
NdiPersonalCare	4039	77.0
NdiLift	4039	77.0
NdiRead	4053	77.2
NdiHeadache	4043	77.0
NdiConcentration	4039	77.0
NdiWork	4049	77.2
NdiDriving	4136	78.8
NdiSleep	4047	77.1
NdiLeisure	4060	77.4
Hscl10Q1	281	5.4
Hscl10Q2	268	5.1
Hscl10Q3	257	4.9
Hscl10Q4	275	5.2
Hscl10Q5	284	5.4
Hscl10Q6	247	4.7
Hscl10Q7	264	5.0
Hscl10Q8	265	5.0
Hscl10Q9	269	5.1
Hscl10Q10	275	5.2
UhiQ1	220	4.2
UhiQ2	236	4.5
UhiQ3	251	4.8
UhiQ4	236	4.5
UhiQ5	243	4.6
UhiQ6	303	5.8
UhiQ7	257	4.9
UhiQ8	309	5.9
UhiQ9	265	5.0
UhiQ10	273	5.2
UhiQ11	245	4.7
UhiQ12	252	4.8
UhiQ13	250	4.8
UhiQ14	252	4.8
UhiQ15	238	4.5
UhiQ16	267	5.1
UhiQ17	280	5.3
UhiQ18	292	5.6
UhiQ19	250	4.8
UhiQ20	244	4.6

	Antall_tom	Andel
UhiQ21	249	4.7
UhiQ22	258	4.9
UhiQ23	249	4.7
UhiQ24	279	5.3
UhiQ25	225	4.3
UhiQ26	239	4.6
UhiQ27	239	4.6
UhiQ28	247	4.7
UhiQ29	245	4.7
UhiQ30	2628	50.1
UhiQ31	2618	49.9
UhiQ32	2567	48.9
UhiQ33	2564	48.9
Eq5dWalk	5248	100.0
Eq5dPersonalCare	5248	100.0
Eq5dOrdinaryActivities	5248	100.0
Eq5dPain	5248	100.0
Eq5dAnxiety	5248	100.0
Eq5dSatisfactionTreatment	469	8.9
Eq5d_L_spm1	798	15.2
Eq5d_L_spm2	835	15.9
Eq5d_L_spm3	846	16.1
Eq5d_L_spm4	847	16.1
Eq5d_L_spm5	862	16.4
Importert	5248	100.0

Skjema 1b

	Antall_tom	Andel
FormStatus	5314	100.0
PatientGender	2441	45.9
AddressQuality	5270	99.2
BackSurgery	517	9.7
NeckSurgery	114	2.1
PelvisSurgery	5314	100.0
PrevSickLeave	5314	100.0
FirstMedExam	5314	100.0
MedicationAFrequency	5079	95.6
MedicationBFrequency	4282	80.6
MedicationCFrequency	2350	44.2
RadiologicalF_Spondylolisthesis	5154	97.0
RadiologicalF_Scoliosis_Subcategory	5234	98.5
RadiologicalF_Modicchanges	5314	100.0
DiagnosticNumber1Type	1221	23.0
DiagnosticNumber2Type	4305	81.0
DiagnosticNumber3Type	5218	98.2
DiagnosticNumber4Type	5304	99.8
DiagnosticNumber5Type	5313	100.0
DiagnosticNumber6Type	5314	100.0
Treatment_OtherAssessment	5314	100.0
Treatment_TreatmentInSpecialistServices	2177	41.0

	Antall_tom	Andel
Treatment_InvidualInterdisciplinary	4345	81.8
Treatment_GroupInterdisciplinary	5314	100.0
Treatment_GroupInterdisciplinary2018	4635	87.2
CourseYellowFlagComplicatingFactors	5314	100.0
RadiologicalFExplainedPatient	5314	100.0
RadiologicalFRelevantPatientPains	5313	100.0
TreatmentMasteryOrientedConversation	5312	100.0
TreatmentCouncellingLifeStyleAndMedication	5312	100.0
TreatmentAbilityToWorkFunctionLevel	5312	100.0
Importert	5314	100.0

Skjema 2

	Antall_tom	Andel
FormStatus	2347	100.0
PatientGender	1094	46.6
AddressQuality	2331	99.3
OdiPain	111	4.7
OdiPersonalCare	113	4.8
OdiLift	115	4.9
OdiWalk	132	5.6
OdiSit	122	5.2
OdiStand	121	5.2
OdiSleep	116	4.9
OdiSex	256	10.9
OdiSocial	124	5.3
OdiTravel	135	5.8
NdiIntensity	1799	76.7
NdiPersonalCare	1799	76.7
NdiLift	1796	76.5
NdiRead	1801	76.7
NdiHeadache	1799	76.7
NdiConcentration	1801	76.7
NdiWork	1803	76.8
NdiDriving	1823	77.7
NdiSleep	1800	76.7
NdiLeisure	1801	76.7
Eq5dWalk	2335	99.5
Eq5dPersonalCare	2335	99.5
Eq5dOrdinaryActivities	2335	99.5
Eq5dPain	2336	99.5
Eq5dAnxiety	2335	99.5
Eq5dSatisfactionTreatment	2347	100.0
Eq5d_L_spm1	215	9.2
Eq5d_L_spm2	231	9.8
Eq5d_L_spm3	232	9.9
Eq5d_L_spm4	233	9.9
Eq5d_L_spm5	250	10.7
UseOfTreatment	94	4.0
TreatmentSatisfaction	100	4.3
PainExperiencesNoActivity	198	8.4

	Antall_tom	Andel
PainExperiencesActivity	171	7.3
WorkingStatus	2334	99.4
IsEmployed	820	34.9
TreatmentOther	2297	97.9
TreatmentPostIndividual	2071	88.2
TreatmentPostGroupbased	2150	91.6
TreatmentPostHospitalExtendedExamination	2118	90.2
TreatmentPhysioTherapist	1710	72.9
TreatmentPhysioTherapistOther	2033	86.6
TreatmentManuelTherapi	2162	92.1
TreatmentPsychomotoricTherapy	2270	96.7
TreatmentChiropractor	2114	90.1
TreatmentOtherTreatment	2042	87.0
PainMedicineNoPrescription	254	10.8
PainMedicinePrescription	335	14.3
Importert	2334	99.4

Avkrysningsvariabler

Denne variabeltypen kan per design ikke være tom så det er umulig å si hva det korrekte antallet avkrysninger er. Tabellen over andelen som ikke har krysset av for variablene under er derfor vanskelig å tolke. Tabellen over hvor mange avkrysninger det er per skjema er kanskje bedre egnet til å avsløre manglende registreringer. Skjema 1a har 50 avkrysningsbokser, mens skjema 1b og skjema 2 har henholdsvis 88 og 11. Hvis bare en svært liten andel er avkrysset på et skjema er det muligens grunn til å være skeptisk til datakvaliteten.

Skjema 1a

	Antall_FALSE	Andel
S2_Working	2873	54.7
S2_Unemployed	5095	97.1
S2_SickLeave	3592	68.4
S2_StayAtHome	5161	98.3
S2_Student	4993	95.1
S2_NAV	4716	89.9
S2_RetirementPension	4808	91.6
S2_Pension	4918	93.7
SickLeaveStartDateUnknown	4854	92.5
PainCausesWork	3289	62.7
PainCausesHome	4804	91.5
PainCausesMental	4745	90.4
PainCausesLeisure	4948	94.3
PainCausesSkeleton	3298	62.8
PainCausesMuscle	3587	68.3
PainCausesNerve	3469	66.1
PainCausesWrongTreatmen	5053	96.3
PainCausesUknown	3674	70.0
IsPainHead	3986	76.0
IsPainBackHead	4053	77.2
IsPainNeckBack	2751	52.4
IsPainNeckFront	3614	68.9
IsPainShoulderFrontRight	3888	74.1

	Antall_FALSE	Andel
IsPainShoulderBackRight	3704	70.6
IsPainShoulderFrontLeft	3966	75.6
IsPainShoulderBackLeft	3814	72.7
IsPainArmFrontRight	4799	91.4
IsPainArmBackRight	4806	91.6
IsPainArmFrontLeft	4876	92.9
IsPainArmBackLeft	4883	93.0
IsPainHandFrontRight	4569	87.1
IsPainHandFrontLeft	4693	89.4
IsPainHandBackRight	4673	89.0
IsPainHandBackLeft	4763	90.8
IsPainUpperBack	3439	65.5
IsPainUpperStomach	4972	94.7
IsPainStomach	4824	91.9
IsPainLowBack	1456	27.7
IsPainHipsThighsFrontRight	3595	68.5
IsPainHipsThighsFrontLeft	3678	70.1
IsPainHipsThighsBackRight	3287	62.6
IsPainHipsThighsBackLeft	3349	63.8
IsPainKneeFrontRight	4263	81.2
IsPainKneeFrontLeft	4331	82.5
IsPainKneeBackRight	4521	86.1
IsPainKneeBackLeft	4551	86.7
IsPainFeetFrontRight	4467	85.1
IsPainFeetBackRight	4466	85.1
IsPainFeetFrontLeft	4487	85.5
IsPainFeetBackLeft	4464	85.1

Antall avkrysninger per skjema

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
206	4	45	266	373	382	444	472	408	335	304	281	243	234	174	158	155	140	101	79	77	62	47	41	30	30	35	19	15	20	18	11	9

Skjema 1b

	Antall_FALSE	Andel
Working	5314	100.0
Unemployed	5314	100.0
SickLeave	5314	100.0
Stay_at_home	5314	100.0
Student	5314	100.0
NAV	5314	100.0
RetirementPension	5314	100.0
Pension	5314	100.0
SeriousIllnes	5288	99.5
Malign	5314	100.0
Fracture	5314	100.0
Infection	5314	100.0
Clauda	5314	100.0
OtherDiag	5314	100.0

	Antall_FALSE	Andel
CurrentRehabStartIsMonth	5314	100.0
FirstMedExamDoctor	876	16.5
FirstMedExamNurse	5118	96.3
FirstMedExamPhys	3912	73.6
FirstMedExamOther	5241	98.6
MedicationNone	3592	67.6
MedicationA	5079	95.6
MedicationB	4282	80.6
MedicationC	2350	44.2
Radiological_None	4953	93.2
RadiologicalUS_CT	5190	97.7
RadiologicalUS_MR	536	10.1
RadiologicalUS_Radikulgraphy	5313	100.0
RadiologicalUS_Discography	5314	100.0
RadiologicalUS_LS_C_Columna	5131	96.6
RadiologicalUS_FlexionExtention	5309	99.9
RadiologicalF_Normal	3985	75.0
RadiologicalF_DiscHernitation	3406	64.1
RadiologicalF_CentralSpinalCord	4937	92.9
RadiologicalF_RecesStenosis	4337	81.6
RadiologicalF_Spondylolisthesis2018	5063	95.3
RadiologicalF_Scoliosis	5189	97.6
RadiologicalF_Modicchanges1	4926	92.7
RadiologicalF_Modicchanges2	5143	96.8
RadiologicalF_Modicchanges3	5308	99.9
RadiologicalF_ModicchangesUnspecified	5242	98.6
Diagnostic_Neck	5314	100.0
Diagnostic_Back	5314	100.0
Diagnostic_SecondGen	5314	100.0
Diagnostic_RadioculopatiNeck	5314	100.0
Diagnostic_RadioculopatiBack	5314	100.0
Diagnostic_ClinicalSpinalStenosis	5314	100.0
Diagnostic_Spondylolisthesis	5314	100.0
Diagnostic_PelvicBonePain	5314	100.0
Diagnostic_OtherPain	5314	100.0
Treatment_FollowUpMunicipality	4359	82.0
Treatment_FollowUpFysioterapeut	3274	61.6
Treatment_FollowUpManuellTerapeut	5173	97.3
Treatment_FollowUpKiropraktor	5171	97.3
Treatment_FollowUpPsykolog	5242	98.6
Treatment_FollowUpKommunalt	5262	99.0
Treatment_FollowUpMunicipalityOther	5252	98.8
Treatment_FollowUpSpecialist	5314	100.0
Treatment_FollowUpOperation	5041	94.9
Treatment_FollowUpVocationalGuidance	5314	100.0
Treatment_DiagnosticInjection	5314	100.0
Treatment_EvaluationBySpecialist	5078	95.6
Treatment_TreatmentOtherRehabCentre	5000	94.1
Treatment_TreatmentOwnSpecialistServices	3945	74.2
Treatment_ControlAfterReviewOrTreatment	4849	91.2
Treatment_IndividualFollowUp1to2Times	4149	78.1
Treatment_TrainingActivation	2625	49.4

	Antall_FALSE	Andel
Treatment_WorkFollowUp	4430	83.4
Treatment_CognitiveApproach	3932	74.0
Treatment_Education	4253	80.0
Treatment_PsykomotoricTherapy	5162	97.1
Treatment_NoTreatment	2854	53.7
OtherSupplementaryDiagnostic_None	134	2.5
OtherSupplementaryDiagnostic_DiagnosticInjection	5305	99.8
OtherSupplementaryDiagnostic_Radikulgraphy	5314	100.0
RadiologicalUS_DiagnosticBlock	5295	99.6
OtherSupplementaryDiagnostic_Emg	5248	98.8
OtherSupplementaryDiagnostic_Nevrografi	5225	98.3
Interpreter	5239	98.6
ParticipantResarch	5189	97.6
ParticipantRaskereTilbake	4709	88.6
ParticipantHelseIArbeid	5314	100.0
ParticipantRelevantResearchTreatmentStudies	5314	100.0
TreatmentEvaluationByDoctor	5312	100.0
TreatmentEvaluationByPhysiotherapist	5314	100.0
TreatmentEvaluationByNurse	5314	100.0
TreatmentEvaluationByPsychologist	5314	100.0
TreatmentEvaluationBySocionom	5314	100.0
TreatmentEvaluationOther	5314	100.0

Antall avkrysninger per skjema

5	6	7	8	9	10	11	12	13	14	15	16	17
91	784	1217	922	752	570	449	270	143	82	25	7	2

Skjema 2

	Antall_FALSE	Andel
S2_Working	1096	46.7
S2_Unemployed	2283	97.3
S2_SickLeave	1947	83.0
S2_StayAtHome	2312	98.5
S2_Student	2248	95.8
S2_NAV	2009	85.6
S2_RetirementPension	2146	91.4
S2_Pension	2199	93.7
RecoverdDateIsNotExact	2347	100.0
SickLeaveStartDateUnknown	2230	95.0
TreatmentOperation	NA	NA

Antall avkrysninger per skjema

0	1	2	3	4
100	1405	683	140	13